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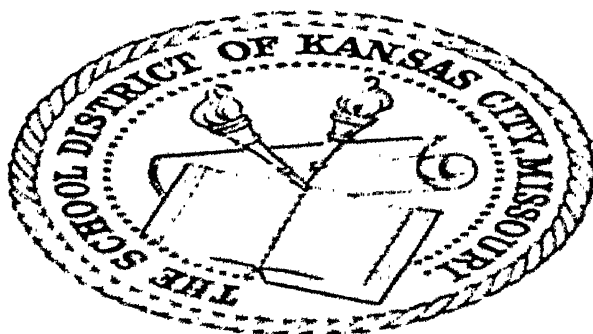


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American CHILD HEALTH *Association*

FORMERLY

AMERICAN CHILD HYGIENE ASSOCIATION

AND

CHILD HEALTH ORGANIZATION OF AMERICA

TRANSACTIONS OF THE FIRST
ANNUAL MEETING

DETROIT, MICH., OCTOBER 15-17, 1923

HEADQUARTERS OF THE ASSOCIATION
532 SEVENTEENTH STREET, N. W., WASHINGTON, D. C.
ADMINISTRATIVE OFFICE
370 SEVENTH AVENUE
NEW YORK

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1924

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GENERAL SESSION

President, the Honorable HERBERT HOOVER, Presiding

GREETINGS FROM THE PRESIDENT OF THE UNITED STATES

The White House,
Washington,
October 12, 1923.

It is a great satisfaction to extend greetings to the first session of the unified societies devoted to the problems of child health. One of the main supports of our national progress is increased physical care and higher physical standards for our children. A strong national organization in this field, created with the support of our public health authorities, in cooperation with our physicians, all endeavoring to secure more vigorous community action and establish methods for the protection of child life and health, is of extreme importance.

I wish to congratulate Secretary Hoover and his colleagues in the successful unification of these efforts in the American Child Health Association, and to express appreciation, not only to those who have given enlarged financial support, but also to the many hundreds of devoted men and women who have given of their time and service to solving these problems of primary national concern. The creation of voluntary agencies in the strengthening of community action is truly an American approach to the solution of our social problems.

Cordially yours,
CALVIN COOLIDGE.

GREETINGS FROM DR. L. EMMETT HOLT

The following letter was received by Dr. Philip Van Ingen.

Please present my greeting to the American Child Health Association. I regret exceedingly that I am not able to attend this first meeting of the new organization. From personal observation here in Japan (Kyoto), and from conferences with many from all parts of the Far East, I am impressed with the importance of our work for the whole world.

The East is looking, as never before, to the West, and especially to America, for guidance in matters relating to the hygiene and health education of children. Though they sometimes make the mistake of defining pediatrics as referring to the "decease" of children, they are eager for our help, and they need it very much, especially in matters of infant feeding and the diet of older children.

They desire nothing so much as to be thought progressive and modern, and copy, not always wisely, our Western methods and ideas. There is a great opportunity for child health work in the East. I hope the American Child Health Association may extend a helping hand.

With best wishes for a successful meeting,

Very truly yours,
L. EMMETT HOLT.

ADDRESS

The Honorable **HERBERT HOOVER**, Washington, D. C.

The growth of the American Child Health Association is the direct result of a national realization of the sad deficiency in the protection of child health. The disclosures in the army draft, under which forty per cent were defective in face of the fact that more than ninety per cent of our children are born with normal physical possibilities, gave to many of us a resolution that with peace we would make further effort at the determination of these causes and at their remedy. Military service is not the purpose of a nation—but it provides a cross section that must give us national concern, for the physical and moral well being of the nation marches forward on the feet of healthy children.

Through consolidation of the leading associations concerned with child health, we have now secured a unity of action among voluntary agencies by the creation of this national association devoted to the protection and promotion of child health.

The consolidated body is now completing the first year of effort. I am able to report great progress in the building up of the organization, the strengthening of its financial resources, the continuation of old activities and the inauguration of the most important projects that have yet been undertaken in the field. We have brought into this body not only associations hitherto engaged with such great devotion, but we have incorporated into it as well the experienced background of those Americans who have dealt successfully with the mass problems of child health in Europe during the periods of acute famine. The health associations from which we have sprung were formerly organized to furnish assistance to local health authorities, to co-operate with the efforts of our great bodies of physicians and nurses, and our educational authorities. In its reorganization, however, we have not only enlarged in these lines with increased resources and vigor, but we have undertaken a very much wider effort in directions that we feel promise to be of great public importance. Our new field is the systematic determination of the shortcomings in child health protection, community by community, and the demonstration of remedy. This campaign of demonstration is by no means

founded in any sense on a public scold or upon public preachment. Our aim is scientific determination of defects in community life and suggesting of remedies with the confidence that the American communities will not rest under shortcomings in the public relations to the care of children.

OUR PROGRAM

Our program now crystallized is as follows:

First: Certain communities have been selected as demonstration centers to show and prove the efficiency of scientific organization in child health. Every possible measure looking toward the prevention of disease and improvement of the health of children, from the days before they are born until they leave the schools, is mobilized in these centers. These demonstrations have been now inaugurated in three new localities and our officers are administering a demonstration which was already in progress at Mansfield, Ohio, on behalf of the Red Cross. The new localities are Fargo, North Dakota; Rutherford County, Tennessee; and Athens, Georgia. The decision as to which communities should be selected was based primarily upon their being representative of typical community problems, and, secondly, upon the measure of promise of permanent local and state co-operation. These new demonstrations are supported by the Commonwealth Fund and together they involve an expenditure of approximately \$350,000 a year, and extend over five years' time. Over 40 localities entered competition to secure our services. In all of these demonstration areas civic bodies, physicians and local authorities are participating in a definite, positive organized manner to lift the state of child health in their community as a demonstration to the nation of what can be done generally through systematic organization and scientifically directed efforts.

Second: Many of the communities which failed in the competition to secure these demonstrations have expressed a great desire for expert assistance in order that they themselves, from their own resources, may undertake similar constructive work for maximum health protection for their children. It has, therefore, been determined that the association shall make every effort possible to secure and develop the necessary trained staff, and to provide them with the expert assistance required, to the utmost of our resources. We hope to extend this form of concrete community action in other directions.

Third: We have determined to add still a further field to our activities which I regard as of first importance. This is broadly the scientific determination of the standing of different communities in respect to their own efforts in child health promotion. The American Public Health Association is now carrying out work along these lines, and we shall in co-operating with that organization, as well as with the State health officers, undertake to set up certain definite standards that mark community progress in our special field. Then we propose to make a determination of the relative approach of different communities toward these standards. For instance, the volume and purity of the milk supply, the hospitalization facilities for childbirth and for children, the clinical service for school children, the educational work upon child health in the schools, housing and play opportunities, infant mortality, the community organization for nursing, the other important factors, will all be given weighted consideration. These things evidence the stage of growth in community responsibility in child health. We propose to examine as many communities as our resources will permit and to grade them as to their relative perfection of these protective measures. We have hopes that we can bring stimulation to many of them; indication of their delinquencies will be helpful in remedy. But we more especially rely upon a realization by the communities of the necessity for enlarged support to the public and private agencies which are already in motion amongst them.

Like all voluntary associations of this character, the success of our efforts is to a considerable degree limited by the resources. The budgets of our demonstrations are covered during the next twelve months. We have an assurance of in the neighborhood of \$300,000 for our other activities. This is very much less than we can usefully employ.

I have no real need to elaborate on the value and necessity of such efforts as these. I am one of those who believe that the standards established by the community itself from a sense of its responsibility are infinitely more valuable than standards established by the imposition of authority from above. Voluntary efforts of this character for co-operation with communities themselves are of the utmost importance. I believe I will be supported in this by our official health controls. Official action is vitally necessary, but their work and their results can go but little beyond the sense of public responsibility, the growth of public responsibility and the growth of public opinion in their support. We can co-operate with them and give effective support

in these matters. The local community is the unit of responsibility in American public life. The sum of progress in the local communities is the sum of national progress. When this progress springs from the community itself we have not only progress in the protection of child life but the reinforcement of the foundations upon which our society must rest. It is our purpose to assist.

I am impressed that discussions of this character, dealing as they do with scientific problems of national scope, sometimes lose their human touch in the practical problem of their statement. But truly these are efforts to lift the burden from those that are the most heavy laden. Through community effort we can lessen the loss of little ones, assure to them greater health and strength. We have lifted much weight from the hearts of millions of mothers; we have given a greater equality of opportunity, a better chance in life to millions of our children.

PROGRESS IN CHILD HEALTH

**Report to the Board of Directors, COURTENAY DINWIDDIE, General Executive,
American Child Health Association, New York City**

In considering the child health problem before us it seems a far cry from the day when sorcery and charms were a favorite means of driving away the evil spirits that were considered responsible for most of the ills of childhood, from restless crying to acute illness. It is over a century since we emerged as a nation, when parents were considered fortunate if they were able to bring up two out of every three of their children.

We have gone far since those days. Hundreds of communities have established consultation centers where mothers may learn the condition of their children and themselves and secure advice for their care. Thousands of teachers throughout the country are taking an ever more active interest in the health of the child as one of the main objectives of the whole process of education. State divisions of child hygiene or bureaus carrying on similar work have been organized in 46 states and public appropriations for child health work have increased markedly, especially since the stimulation of the Sheppard-Towner Act, by which local appropriations match Federal subsidies.

All of these things are multiplications of interest, machinery or work. What have been the real results?

There has been a reduction of fifty per cent in the infant mortality of this country during the past 20 years, which is a tangible and unquestioned evidence of real progress.

Dr. Dublin, from an analysis of work of the Manhattan Maternity Center Association, the Boston Instructive District Nursing Association, and the obstetrical service of Johns Hopkins, reaches the positive conclusion that, from careful instructive service in the home, in conferences and clinics, combined with thorough obstetrical care, we can expect with certainty a further reduction in infant and maternal mortality in the homes thus served. In short, we are confident that the methods we are advocating can, and do, produce real results and that from them we can expect a still further reduction in the infant and maternal mortality rates.

We are accumulating evidence that the educational as well as the protective measures for the child during the school age can be measured not only in gains in weight and corrections of defects, but in general increase in robustness and vigor. Unfortunately the yardsticks that have been used in this field have not given an exact basis of measuring progress such as afforded by the infant mortality rate. One of our present tasks is finding new yardsticks.

Against these optimistic evidences of progress let us consider some of the facts on the other side of the question. In spite of the progress of the United States, its infant mortality rate, so far as statistics can be considered comparable, ranks it as sixth and its maternal mortality rate as sixteenth or worse among leading nations of the world, according to the United States Children's Bureau. Many of the reasons for this are not hard to find.

Dr. Frances Sage Bradley, speaking of the rural mother and child, tells of methods of child care which easily rival those of medieval days of witches and sorcerers. The helpless new arrival in the world is often subjected to treatment varying from a frequent spinal cupping to more remarkable superstitious observances in which the use of a rabbit's foot is a commonplace and refinements consist in the use of fried toads, the blood of a live terrapin and various other charms peculiar to the particular individual or community.

We do not have to go into the isolated mountain region to find examples of ignorance or neglect in the rearing of children, such as are almost unbelievable. Staff members of the American Child Health Association only within the last month found a physician, representing a government agency, permitting a small infant to be grossly infected with tuberculosis, through sleeping with its mother who was in a dying condition, and, for another baby, prescribing medicine for fever without any diagnosis whatsoever.

The Children's Bureau, in a study of a group of 6,015 children of from 2 to 7 years of age in Gary, Indiana, has reported that only 25, or less than one-half of one per cent, were fortunate enough to receive a diet which was reasonably adequate and not excessive, namely, which included milk, whole cereal and fruit or a vegetable daily.

Members of the staff of this Association, in a recent study in a rural area, have found agricultural districts which should have been best equipped to supply some of the basic necessities, such as milk, butter fats, and green vegetables, almost devoid of these essentials, because either the farmers were shipping them away or else they had not provided for a well balanced planting.

It has been estimated that in one of our states having one of the best controlled milk supplies, a large percentage of the cattle are infected with tuberculosis. In thousands of communities either the lack of any law governing milk inspection or inadequate enforcement of such a law is exposing the younger children to danger.

These are only a few of the indications that the progress we have made is just the barest beginning of what we must make if we are to do our duty to the children of today and to the nation of tomorrow. We have accumulated much knowledge as to methods of prevention of disease and as to how to give the growing child the fullest opportunity for development, but there are wide areas and millions of people in this country who have received no adequate benefit from this knowledge, which is applied with any degree of thoroughness in only a comparatively few centers. What has the American Child Health Association done to remedy this condition?

THE CONTRIBUTION OF THE AMERICAN CHILD HEALTH ASSOCIATION

Several close students of national health and welfare work have stated their opinion that the very fact that an amalgamation so far-reaching has been achieved, that it has weathered the storms incident to such movements and that its machinery is running more and more smoothly, is in itself an ample justification for this first year of the new Association. In addition, the development of good will and practical working relationships with the several important national organizations, clears the way for effective action with the maximum of co-operation and the minimum of wasted effort.

By a mutually advantageous arrangement, Dr. Crumbine jointly represents the Conference of State and Provincial Health Authorities and this Association. This is a unique relationship of official and non-official agencies. The Nursing Service is operating through the National Organization for Public Health Nursing effectively functioning as a division of nursing for this Association. The significance of this working relationship is second only to that of the co-operation between this Association and the Conference of State and Provincial Health Authorities.

The building up of a rounded staff of persons capable and trained in the fields of medicine, nursing, teaching and other specialties has not been the least task before the Association. The quality of the personnel which has been engaged so far is one of the best assurances of effective work in the future.

But, while laying foundations has of necessity been one of the main tasks this year, the calls for practical service to states, communities and their mothers and children have been a paramount consideration. We have increased our budget from a yearly rate in January, 1923, of \$200,000 to a yearly rate at the present time of \$500,000, representing a corresponding increase in personnel as well as other expenses. We should therefore be able to show service rendered as well as plans for the future.

Let us see first what are some of the accomplishments of these eight months that have passed, before turning to objectives and work ahead for 1924.

ACCOMPLISHMENTS DURING THE EIGHT MONTHS FROM JANUARY TO SEPTEMBER, INCLUSIVE, 1923

Demonstrations

One of the responsibilities which we have shouldered during the year is the administration of the community demonstrations in child health protection and promotion, financed by the Commonwealth Fund and the American Red Cross. These constitute a venture in co-operation between national agencies and ultimately five communities, to show how the latter can most effectively organize their own resources to reduce maternal and infant mortality and correct physical defects and to promote robust physical development among children of all ages. Real progress which may stimulate other communities rather than ideal achievement is the purpose of the demonstrations.

THE RED CROSS DEMONSTRATION

Mansfield and Richland County, Ohio

Under Dr. Walter H. Brown and his staff, the Mansfield and Richland County Child Health Demonstration is nearing the end of its second year. The outstanding achievements are:

1. A consolidation of all nursing work has been effected. Four nurses have been added in the city and county from community funds and two have been added from demonstration funds.

2. Headquarters for the demonstration have been rented by means of local funds.

3. A thorough plan of health work in the schools of the city and county has been instituted, and, in co-operation with the teachers,

a definite course of training of teachers in health education has been instituted.

4. A whole-time pediatricist has been engaged by the demonstration, with the co-operation of the local physicians, to serve as consultant to the physicians and to conduct examinations of babies and children of all ages, preparatory to having all this work eventually taken over by the physicians.

5. Four health centers have been established in the city and county with 1,063 children regularly enrolled for health supervision.

6. In co-operation with the medical profession, 2,733 school children and 563 pre-school children have been examined.

7. As a direct result of the demonstration work, a trained home economics teacher has been appointed for every city and village high school in the county.

8. Arrangements have been made, in co-operation with the city and county authorities, for the beginning of a whole-time County Health Unit on January 1, 1924.

9. Definite arrangements are being made for the co-ordination, next year, of private health work and the city health work through a co-operative arrangement between the Community Chest and the city authorities.

10. Steady development has been made of Mansfield as a center for visitors studying child health work and for occasional training, to a limited extent, particularly in the case of nurses.

COMMONWEALTH FUND DEMONSTRATIONS

The Commonwealth Fund has placed its demonstration program under a committee representing the Fund and this Association, your General Executive serving as Director of the Demonstrations.

Fargo, North Dakota

Under the leadership of Dr. William J. French and his staff, the following items of progress in health work in Fargo may be noted since January 1, 1923, when the demonstration was started:

1. A whole-time health officer has been appointed by the city.
2. Headquarters for the demonstration, including space for other health work of the city and the health officer, have been provided by means of local funds.
3. The consolidation of all nursing work and the districting of the

city in order to completely eliminate duplication have been accomplished. Three nurses have been added by the demonstration and three are carried by local funds; one of the latter has been added since the demonstration began.

4. A program of health education in the schools was launched last Spring; a play center program, including health, was carried on in the city parks during the past Summer.

5. A whole-time pediatricist has been engaged by the demonstration, with the co-operation of the physicians. He is in entire charge of the examination of babies, pre-school children and school children and is being consulted more and more by the local physicians. The latter are giving increased service, in advice along the lines of hygiene and preventive medicine, as evidenced by reports made by mothers coming to the demonstration's consultations.

6. The Nursing Service has handled 2,475 individuals since its inception March 15th; the Medical Service has examined 1,162 children in the kindergarten and first and second grades since April 15th; 168 school children and 291 infants and children of pre-school age have been examined at consultations; 1,124 children have had their teeth examined.

Rutherford County, Tennessee

Rutherford County was selected as a demonstration area from among 40 competing communities. It is a typical Southern agricultural county, having mountain district problems and 30 per cent negro population.

The County offers the following assurances:

1. Immediate appointment of a whole-time health officer to be paid from local and state funds.
2. Provision of headquarters from local funds.
3. Written pledges of active participation and of permanent continuance of the work, made by all local groups, official and non-official.
4. Pledges of co-operation from the Middle Tennessee Normal School, from the educational institutions in Nashville, and from the State Health Department in aiding the local work and in using it as a training center for physicians, nurses and teachers in so far as this can be done without detriment to the primary purposes of the demonstration.

Athens, Georgia

Athens was selected for an urban demonstration center from among the same 40 competing communities. It has had a full-time health officer and staff for several years, but its maternal, infant and child health problems demand attention.

The City offers the following assurances:

1. Health and School Departments, Medical Association, University and civic groups which are all eager to secure permanent benefits to the community through the demonstration, will co-operate.
2. The provision of headquarters from local funds.
3. Combined headquarters for the demonstration and the Health Department, on the invitation of the health officer.
4. Pledges of co-operation in health work by the State authorities.

Fourth Commonwealth Fund Demonstration

The Committee in charge has not yet voted upon the area from which the fourth and last of the Commonwealth Fund demonstrations will be chosen. The selection of this site will be one of the tasks to be taken up early next year.

Concentrated Service to States and Communities

The suggestion that this Association might lend members of its staff to communities for longer periods of time than represented in the usual advisory service to states and communities to assist them in determining their needs, organizing their work effectively to meet such needs and carrying out their programs of service along sound lines has been welcomed by many state and local representatives of official and private agencies. The demands have been widely varied in character and several staff members are now ready to answer these on an experimental basis with a view to seeing how far it is possible for the Association to extend this type of service.

1. Eighteen of the 40 competing communities have asked for temporary assistance, either directly or through their State health officer, from the American Child Health Association, in further organizing their local health interests. This service will represent variously a general organizer, a health officer, a pediatricist, a public health nurse or a health teacher as needed in the respective communities and for varying periods of time.

2. The organization of 7 local public health associations has been an outgrowth of the competition for the demonstrations and an expression of their aroused and organized interest in child health. An immediate appropriation of \$1,000 has been made by one community. The object of these associations is to support the local officials in their health work.

3. Beginning October 1st, a demonstration is being made in co-operation with the Secretary of the State Board of Health of Minnesota, who is also President of the Conference of State and Provincial Health Authorities, to show what can be done to improve the health of Indians, especially of mothers and children. This will be helpful to the health officers who handle the increasingly large State problems of Indians who are becoming American citizens.

4. Beginning October 1st, a co-operative educational campaign is being carried on in North Dakota for one month, under the State Board of Education, reaching all the teachers of the State and at the same time reaching many of the men's and women's clubs, informing them of the importance of health education and the necessity of their taking part in securing appropriations and better laws, together with lectures to the high school children. Three members of our staff are co-operating in this campaign.

5. At the same time a co-operative study is being conducted in North Dakota with the State Dairy and Food Commissioner and the State Health Department, of the condition of the milk supply of the State, bacteriological service to be furnished by the State Laboratory and supervisory help by this Association. This Association will assist the State to make effective the results of this study when completed.

6. At the same time another co-operative study is being conducted in North Dakota, with the State Health Department, of conditions relating to birth registration, with definite plans for aiding in making the results effective in bringing the State into the Birth Registration Area.

7. A brief advisory service was rendered to the State of Maine in September, which culminated in the formulation of a tentative program for child health work, involving the co-operation of the State Department of Education, the State Department of Health, the Maine Public Health Association, and various private organizations. The assistance from the American Child Health Association was considered very valuable by the State groups. This advisory service led to the discovery of a complete registry of crippled and defective children in the State. This Association will undertake, in the immediate fu-

ture, to bring to the attention of the men's and women's service clubs of Maine (such as Rotary, Kiwanis, and others) the problem and obligation of caring for these children in their respective communities.

8. Definite agreement has been reached with the American Association of Dairy Food and Drug Officials and the Conference of State and Provincial Health Authorities for co-operation in a national campaign for improving the milk supply of the country. One indication of the size of the problem is that eight states have already requested us to assist them in campaigns for securing a wholesome and clean supply of milk.

9. A conference was held in Boston on October 10th with a number of State Health Officers, for the purpose of planning a national campaign for enlarging the Birth Registration Area. Seven states have requested assistance in this project.

10. In addition to the foregoing, a brief review has been made by Dr. Bolt, Dr. Crumbine and others, of general State conditions relating to health in 24 states, giving a clear idea of the ways in which this Association can be of immediate help.

11. Visits have been made by members of the staff to 43 communities for fairly thorough consultation service on the local problems and to 150 for more casual advice, lectures or other services.

Medical Service

One of the most important services which the Association can render is that of keeping in touch with the medical profession and informing them of the need for child health work and current progress in this throughout the country, as well as stimulating the better training of physicians for preventive service in their private practice and the better training of medical health administrators. This involves service to the medical and public health training centers and schools; to national, State and local groups of physicians through addresses and conferences and through advice and assistance in bringing them into definite programs of organization and service in their communities.

Some of the things done during the past year have been the following:

A beginning only has been made of a study of the training facilities offered by existing universities and public health schools. In this preliminary inquiry replies received by Dr. Bolt from 53 leading medical schools as to all of the opportunities for training physicians for health

work with children, particularly preventive pediatrics and obstetrics, have revealed an urgent need of improvement in such training. These inquiries have been supplemented by visits to 12 of the more important of these medical schools.

Courses of thoroughly planned lectures have been given by the Director of Medical Service in 3 medical and public health schools and 25 lectures have been delivered in other courses of training.

As a result of an appropriation of \$10,000 for medical scholarships, 100 applications have been received and plans are being perfected to utilize these scholarships to increase the number of able workers in this field, and to stimulate a better type of training in leading centers.

The Director of Medical Service has devoted much time to consultation service in the field and especially to State Bureaus of Child Hygiene, State Health Officers, County Medical Societies, and Affiliated Societies of the Association.

Medical Service has suffered much from lack of adequate personnel. One of the main concerns of the Association next year will be to build up sufficient trained personnel to enable this service to meet the great opportunities before it.

Health Education

Health Education, as defined in the work of this Association, covers the whole range of education and training for the child of school age; of consultation, advice and practical assistance to the school teacher, and the setting of standards for work in these fields. To this has been added, through the amalgamation, similar functions for the child under school age. In addition, in the process of the amalgamation, the Health Education Division has undertaken the direction of the Editorial Service and the printing and distribution of literature for the entire Association, up to the time of the organization of the Bureau of Publications.

The carrying out of these purposes under Miss Sally Lucas Jean has been through many diverse methods, including correspondence with teachers; conferences with selected groups and national and international conferences; appraising and promoting the development of courses of health education in normal schools, universities and training centers generally; the preparation of literature; suggestions and methods to bring about a new conception of health in terms of physical welfare, sound bodies and wholesome ideals, especially through the practice of sane health habits.

In the record of accomplishments the following items should be particularly noted:

The wide contacts of the Division are shown by 34,032 incoming and 64,945 outgoing letters, reaching every state of the Union and thirty-five foreign countries.

Exhibits, literature and other material have been supplied to 50 teacher training institutes, women's clubs and Parent-Teacher Associations. Six of these institutes have been visited and helpful advice has been given them, in several cases extending to definite advisory service on the ground over a period of months.

Under the \$10,000 appropriated by this Association for teachers' scholarships, 13 teachers have taken courses in summer schools and 10 are now in various universities. There were a total of 624 formal applications, representing all but three states in the Union as well as Hawaii, the Philippines, England, China and Canada, 2,700 teachers' names being suggested for these scholarships. All of these are furnishing valuable contacts and opportunities for help in stimulating local child health programs.

In one of the large universities a faculty committee has been organized to plan a health education course and also extension work along this line. In co-operation with a very large high school, a definite course is being worked out for the students; this to be used in the training of teachers. Other universities are co-operating in similar developments.

Under the \$25,000 appropriated by the Metropolitan Life Insurance Company, \$500 is to be given to each of 50 teachers in cities of 50,000 population or more. Far-reaching results are expected in stimulating teachers in the actual carrying out of local health programs as well as in helping them in their further training.

The International Health Education Conference planned by several committees of the National Education Association, with the cooperation of the Health Education Division of this Association, was attended by representatives of 32 countries. The attitude of those present evidenced a live and growing conception of the necessity of making health one of the main objectives of the whole school system. The Conference also brought together authorities from many different angles. Resolutions were drawn up and approved by the World Education Conference, expressing some of the important objectives of a health education program.

Dramatic characters of this Division have given 231 lectures, reaching 80,000 school children of grade and high school ages. The serv-

health dispensary and must conduct its activities in close alignment with infant welfare and public health agencies. Indeed it must be converted into a child hygiene agency which will have a new concern for physical soundness and mental health. To realize this destiny, it must come more fully under medical and nursing influence.

In view of these possibilities, the new nursery school movement, both in England and in America, takes on considerable significance. The nursery school as a public hygiene agency has received the official sanction of Parliament through the Education Act of 1918. In our own country, it is altogether on a voluntary and pioneer basis. One of the most notable of all nursery schools is the Merrill-Palmer School of Detroit, which was established in 1921, and reflects the vision of its donor. This nursery is demonstrating the possibility of adapting medical and educational procedures more systematically to promote the development of children from two to six years of age and also to train the present and future parents of such children.

It is too early to assess the work and the significance of the nursery school and, at present, we may regard it sympathetically as a kind of third party movement through which the full responsibilities and opportunities of the American kindergarten will be made more clear. We do not so much need the nursery school as an additional and separate agency, but we may need it as a stimulus which will bring the kindergarten to a prompter realization of its functions in a program of pre-school hygiene.

3. PARENTS

Finally, the welfare of the pre-school child will be intimately dependent upon the character of his home and upon the intelligence of his parents. The administrative task of pre-school hygiene resolves itself largely into problems of parental guidance and pre-parental education.

From the broad standpoint of public policy, no more far-reaching measure in behalf of the children of the future can be instituted than a systematic and sincere type of pre-parental education. This education must be so conceived and so administered that it will reach the little mothers in the grammar grades and girls in high school, normal school, and college. It must reach also the boys.

By developing the possibilities of a periodical health service and by bringing it through the kindergarten, into living relations with our vast public school system, we shall be able to meet more completely the needs of the pre-school children of the future and of their parents.

through syndication through the newspapers and later publication in book form. These articles are very readable and at the same time contain sound and most helpful advice to parents and others interested in the child's care.

The magazine, *MOTHER AND CHILD*, has been issued to the Directors and most of the membership of the Association regularly from month to month. Miss Babbitt has been in charge as Research Editor and Dr. John A. Foote has served in a supervisory capacity, pending the appointment of the new Director of Publications.

Nursing Service

All nursing service of the Association, including that formerly done for the American Child Hygiene Association by Miss Leete and that of the Child Health Organization of America by Miss Rose, has been combined in a service through which the American Child Health Association and the National Organization for Public Health Nursing carry on in common their work so far as it relates to child health in the nursing field. Miss Stevens, Director of the National Organization for Public Health Nursing, serves as a member of the staff council of our Association, and Miss Bears, nominated by this Association, serves on the staff of the National Organization for Public Health Nursing as secretary for school nursing. Other services are to be added as soon as practicable.

The Association has been responsible for a comprehensive survey of nursing work in the State of Pennsylvania. The request for this came to us from the Governor of Pennsylvania and was turned over to the National Health Council. Our Association, from the point of view of the child, and the National Organization for Public Health Nursing, both members of the Council, are now co-operating in the study under the Council's auspices. This study is nearing completion and will be submitted to Governor Pinchot and the State Bureau heads in the near future.

A minimum curriculum for student nurses, in subjects pertaining to child health, was drafted and recommended for adoption to the National League of Nursing Education. This has received favorable consideration and has been referred to the appropriate committee.

An appropriation of \$10,000 was made by this Association for nurses' scholarships. It was decided that the object of these scholarships should be to prepare nurses and teachers of nurses for the various phases of child health work, including maternity, prenatal, infant, pre-school, and school nursing. Twenty nurses were awarded

scholarships, two receiving \$1,000 fellowships, four \$800 scholarships, two \$500, four \$400, three \$300, and five \$250.

The applications for these scholarships numbered 42 and came from 38 states and Canada. Tremendous interest and a very sincere desire on the part of nurses to further their education were evidenced. The applications which it was not possible to accept, furnish an excellent opportunity for making further contact with each of these nurses.

Research

One of the important objectives before the Association in organizing the Bureau of Research has been to secure a clear, comprehensive and accurate picture of child health conditions and needs and an appraisal of methods of meeting those needs which shall enable us to put the whole work of the Association and of all of its bureaus on the soundest possible basis of efficient service.

The Bureau, under Dr. George T. Palmer, has been built carefully and thoroughly from the ground up. The following are some of its important projects under way:

1. A study has been made of the activities and plans of the Manhattan Maternity Center Association, which applied for admission to the American Child Health Association. Their application is now ready for consideration.

2. A comprehensive study has been started of the child health situation in this country, showing its present status in concise fashion, graphically illustrated. This report should furnish us with clear-cut objectives for this Association which will permit a balanced program of useful work, with aims clearly revealed.

3. The preparation of a pamphlet on the subject of weighing and measuring of children is under way.

4. The preparation of an examination form for pre-school children, together with a descriptive pamphlet, is nearing completion.

5. Definite measurement of the results of the child health demonstrations has been begun and a special staff is being engaged to devote themselves very largely to this work.

6. A study of the present status of health education measures in elementary and secondary schools has been begun in co-operation with the American Public Health Association and the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association.

7. A study of various methods of school medical inspection is being carried out in co-operation with the American Public Health Association.

8. A study of methods of measuring health knowledge and methods of health education is being carried on in co-operation with Teachers' College.

9. A library and information service has been started by a staff member of the Research Bureau, serving with the National Health Library.

10. A preliminary analysis has been made of the correspondence of the American Child Health Association with a view to securing highest effectiveness in this branch of the Association's work.

11. A study of the present status of health measures for the pre-school child has been begun, to complete the information collected on this subject under the committee previously appointed by the National Child Health Council.

PROGRAM FOR 1924

Many projects of greatest importance are already under way and have been touched upon in the statement of accomplishments, but it is essential to review some of the major objectives before the Association and its plans for service.

General Objective I. To Obtain a True Picture of Conditions Relating to Child Health, Nationally and Locally, Upon Which to Base Effective Action.

A GENERAL REVIEW OF CONDITIONS IN THE NATION

In few, if any, ways could the Association render greater service than to carry through to completion the study already under way which shall reveal as completely, accurately and clearly as possible a picture of child health conditions and needs in this country. A review of available data, which has already been begun, will be completed and first-hand studies of conditions relative to infant and maternal mortality, the extent and seriousness of defects of childhood, the production of wholesome milk and its protection from contamination, birth registration, adequacy of state and local health legislation and machinery, will be carried through.

With the present staff of the Research Bureau, the preliminary statement on available data will be ready on January 1, 1924. This will be supplemented by the preliminary first-hand review of conditions, which will be ready about March 31, 1924. Additional data will be collected throughout the year so that at the end of 1924 we should have the most complete picture ever assembled of the conditions relating to child health in any country.

YARDSTICKS FOR INDIVIDUAL COMMUNITIES

A scale, by which the status of conditions affecting child health in any community may be measured, is being worked out. The elements of such a scale are ready for submission to the Board of Directors. A try-out of measurement of one or two communities under such a scale will be undertaken, beginning in November. The further modification of the scale and extension of its use in measuring communities will be developed as indicated by the result of this first trial.

The whole procedure with reference to the measurement of communities and its application will be worked out in the closest consultation with the Executive Committee of the Conference of State and Provincial Health Authorities and also with the American Public Health Association in conjunction with its plan for bringing the general health work of such communities up to standard.

It is hoped in this way to stimulate communities to the improvement of those conditions which affect the health of mothers and children, just as the yearly publication of infant mortality rates has greatly stimulated the study and reduction of infant mortality throughout the country.

OTHER STUDIES PROPOSED

In order to improve our knowledge of the best methods of serving the child during his "neglected age," the study already begun of work done for the pre-school child will be carried to completion and the results will be published. Similarly a study of methods of medical inspection of school children is being carried out with a view to stimulating much needed improvement in this branch of service throughout the entire country.

The review of the status of health education work in the schools has already been described, and, in co-operation with Columbia University, a study of methods of measuring health knowledge should afford additional information upon which to base a sound school health program.

Another significant suggestion has come from Mr. Carstens, Director of the Child Welfare League of America, and Dr. John A. Lapp, Director of the Department of Social Action of the National Catholic Welfare Council, to make a study of the health of the institutional child, which, if it can be undertaken, should be of far-reaching benefit to more than 200,000 children in institutions in this country and the results of which should be widely used by the interested organizations in the improvement of standards of child care.

General Objective II. Working Through States and Communities in Building Up Organization and the Development of Local and State-wide Programs.

No branch of the Association's work shows greater promise in securing tangible results for communities than the lending of experienced organizers to assist in the development of local programs and effective organization to carry them out. Some of the demands upon the Association call for trained specialists in certain fields who also have organizing ability, such as the demands of one county for assistance in raising the standards of the work of 200 midwives (as compared with 25 in another entire state), most of them illiterate, and in eliminating the wholly unfit. Other demands can be met by experienced field workers with a general knowledge of health and welfare problems as in the case of one state where a member of the staff is being lent to the Division of Child Hygiene to develop health organization in the various townships.

In other instances, one of the main objects of thus assisting states and communities will be to bring together the various public and private agencies and to secure a concentration upon definite needs with a view also to the development of as complete a program as possible.

In North Dakota this month we are having an excellent example of such concentration, through lectures to teachers' institutes on health education, following this up with talks to the children themselves and presentation of school health problems to men's and women's organizations; at the same time co-operating with the State Health Department in a state-wide survey of the wholesomeness and purity of the milk supply and in another study of conditions relating to birth registration. All of these things are leading up to action by the State and local authorities to improve the regulation of milk and to bring the state into the Birth Registration Area, and to increase appropriations and support for health work in the schools throughout the state.

We are planning during the coming year to render similar service to from 25 to 45 communities and to from 10 to 15 states. Already 8

states have requested our help in milk campaigns and 6 in measures for improving birth registration and 18 communities have asked for aid in organizing to deal with their local problems.

These are the results of fairly brief contacts with less than half of the states of the Union. The demands for the services of the Association would be more than trebled if funds and personnel could be secured to meet them and this fact were generally known.

General Objective III. Promotion of More Effective Service by Existing National Groups.

TRAINING OF PROFESSIONAL WORKERS

The executives of the Association are continually impressed with the great dearth of capable trained workers to carry on the child health work for which there are increasing demands throughout the country. There is double need of stimulating more individuals to secure adequate training and of stimulating training centers to give courses better calculated to fit their students for the problems before them in the child health field. The Association will, during the coming year, begin a system of definitely appraising the courses of institutions for such workers throughout the country. It is planned to appraise every medical and public health training center of consequence and the important universities and to make a rough classification of some of the normal training centers for teachers.

SCHOLARSHIPS FOR TRAINING OF WORKERS

It is also proposed to stimulate better training through the offering of scholarships for physicians, nurses, and teachers to secure more workers and to promote better training. These scholarships will stimulate a hundred or more among each of the professional groups mentioned to study their own qualifications and to improve their own methods of work, besides the fifty or more successful candidates for scholarships who will be enabled to improve their training.

Our budget also provides, in the case of teachers, for such supervision as will be necessary on the part of this Association over the scholarship fund of \$25,000 appropriated for teachers by the Metropolitan Life Insurance Company.

CONSULTATION AND ADVICE FOR PROFESSIONAL WORKERS

The physicians of the country are one of the most powerful and effective influences in the individual homes. A large percentage have

not been in sympathy with public health measures, partly through failure of private organizations and public officials to take them fully into consultation in planning their work. There is no more important service that the Association can render than, in co-operation with the American Medical Association and other similar bodies, to bring home to the physicians the vital need of a thorough understanding of the problems of child health and of their obligations in carrying out such measures as are needed for the saving of life and the promotion of health.

There is no other force in the country which reaches 20,000,000 children through close and intimate daily contact as do the teachers in the schools. In addition to stimulating better training, the Association has a large responsibility for assistance to the army of teachers and school authorities already at work. Through closer and closer co-operation with the educational groups of the country it should be possible to relieve this Association of much of its expense for this consultation service to teachers in the course of the next few years.

Close co-operation with the National Organization for Public Health Nursing in its admirable efforts for the training of nurses is all that is required of us in this field.

MEN'S AND WOMEN'S ORGANIZATIONS

The possibility of using the men's and women's organizations, such as the Kiwanis Club, the Rotary Club, the National Congress of Mothers and Parent-Teacher Associations, the General Federation of Women's Clubs, Chambers of Commerce, National League of Women Voters, et cetera, has never been adequately realized for the purpose of promoting and protecting the health of the children of the country.

The most effective work with these clubs will be in actually concentrating the attention of local branches upon the specific problems of their states and communities.

An excellent instance of a concrete opportunity for service through such organizations is the list of all the crippled children of the State of Maine, which this Association proposes to bring to the attention of the different men's and women's organizations so that defects may be corrected and adequate care given to these unfortunate children. Similarly, giving them the opportunity to participate in such popular movements as campaigns for better milk and birth registration is the sort

of thing that will appeal to their humanitarian instincts and give them a practical way of taking their part in the child health program.

CONFERENCES

In addition to the Annual Meeting of the Association, with its valuable opportunity for exchange of ideas, securing the help of the Directors and members in plans for the future, the Association will arrange from time to time for conferences among selected groups of individuals, to help in formulating plans and in suggesting more effective ways of carrying on work for the health of mothers and children throughout the country.

Objective IV. Public Information and Education

It is too early to give final plans as to the Association's program for next year for public information and education through its own magazine, columns in other periodicals and the press, and through the distribution of literature.

A new Bureau of Publications has just been formed with Mr. Arthur Tomalin as director, and a thorough study of the whole field is the first requisite for effective action.

In the budget estimate for the coming year provision has been made for carrying the editorial service, which seems essential, and for improvement and extension in the magazine.

We have great hopes of this Bureau as a means through which knowledge of child health problems and their remedies may be more widely disseminated and many more may be stimulated to effective action. Also, it may point the way to broadening the basis of understanding and support for the child health movement of the country so that it may become a truly democratic one.

Objective V. Demonstrations

The program for the Red Cross and Commonwealth Fund child health demonstrations has already been laid down and discussed from time to time. The problem before the Association is how it may make itself most serviceable in the planning and carrying on of these demonstrations and interpreting and applying the results for the benefit of every other community in the country. Their possible use to a greater extent as training centers for professional workers is now being studied.

WORK OF OTHERS

I have fully intended in making my report to the Association to give some picture, even if an inadequate one, of the fine work being

carried on by Government bureaus and other national associations for the health of mothers and children in this country. It is impossible in the time available even to enumerate the activities of these agencies in the interests of the child. However, I do want to register the deep appreciation of the American Child Health Association for the fine contributions that are being made by the Children's Bureau, the bureau in charge of field investigations in child hygiene of the United States Public Health Service, the Bureau of Education, the Extension Division of the Department of Agriculture, and several private national associations whose work deals most directly with mothers and children. It is only through the co-operative effort of all of these forces that we can hope to be successful in our child health program. We have already linked our work up with the Conference of State and Provincial Health Authorities and with the National Organization for Public Health Nursing. We at the same time plan to work out with the other agencies a program which may represent the minimum of wasted effort and the maximum of co-operation.

CONCLUSION

To sum up, we may say that the amalgamation is an effective one, resulting in greatly increased achievement in the interests of child health through private effort. The services now being rendered to states and communities and the projects that are to be taken up in the next few months lead us to hope that next year will put us years ahead in the record of achievements. We believe that in the course of from three to five years we can help materially in rapidly closing the gaps in the ranks of those states which have adequate birth registration, protection of milk and machinery for child health work and in those communities that are similarly equipped for service to mothers and children.

Above all, we trust that we shall do our share toward bringing about a community-wide and nation-wide appreciation of the great importance of the child and a sense of the individual responsibility of every parent and every citizen.

If we carry out such a program we shall no longer have anything to be ashamed of in our record but rather shall be able to help as leaders in a world movement for saving life and building up the health and strength of the coming generation.

BROADCASTING CHILD HEALTH

MRS. WILLIAM BROWN MELONEY, Editor of "Delineator," New York City

You have listed me on this morning's program to speak on "Broadcasting Child Health." I am interpreting this subject in its broad sense. I think I have a few things to say to you on it.

Knowledge is without influence until it is given to the public. It is without power until it is accepted by the public.

One of the longest steps in the progress of the world was taken when that new science known as publicity was developed.

In early history there was the king's herald who told the people what the king wanted known. Then came town criers and, after long centuries, the printing press was invented. It was a thousand years before advertising crept into the printing press. It was a hundred more before publicity was born.

Twenty-five years ago publicity was called "press agenting," and it concerned itself chiefly with such matters as Barnum's Circus, political campaigns and Lillian Russell's milk baths for beauty.

Then the Great War began. It became necessary to reach millions upon millions of people—quickly. They had to be taught to save foods—certain foods—to conserve man-power, to organize for relief and other work, to save money and buy Liberty Bonds, to guard against disease, to think in concert as one people, and one of the blessings of the war was a perfected system of publicity, which taught us the science of reaching the people.

To Herbert Hoover, more than any other one person in the world, is due the credit for the perfection of that new, practical, public spirited standard for publicity. He got together the minds that could develop this work, which could appeal to the best that is in the nation. That was long before the United States went into the War.

It is the new method of public education. It is a very technical, a very highly specialized, important part of the machinery of the world.

I cannot impress upon you too strongly the importance of the power of publicity in the world today. It is the largest single factor in shaping public opinion. And public opinion is the force that makes for war or peace, prosperity or destruction. One generation ago, public opinion was not a power comparable with its force today, because it lacked the cohesion and impetus of publicity. This power must be used for constructive work. Without it your organization could not be effective.

Publicity is another word for service to the multitude.

When the child of one of our multimillionaires becomes ill, the schedules of railroads may be disarranged to rush the most highly skilled physicians to its rescue. Trained nurses may be hired in groups, and the medical wisdom of two continents may be called upon.

And yet, with all this expensive array, what does it profit the child beyond the self sacrificing vigil of its own mother?

Only one thing—expert knowledge. By that much, and by that much only, is the privileged child better off than the ordinary child.

But this expert knowledge in many cases is the determining factor. It swings the balance towards recovery, or it renders that far greater service—prevention.

Here is what might have been called one of the prime injustices of life. But there is something we can do about it.

Mostly, children do not just get sick. There is ill health as a background. How often do we hear the phrase, "If he could only have had a better start." Here, again, is one of the apparent injustices of life, that every child is not given a better start.

THE MISSION OF THE AMERICAN CHILD HEALTH ASSOCIATION

The injustice is not beyond our control. You have in the American Child Health Association, the highest expert authorities on this subject. You have the information mothers need to give their babies a right start and to keep their children in health.

We need good physicians—specialists. But to make their knowledge power, to make them really serve the world—we need publicity.

There exists today in the hands of the experts in this Association, enough accurate knowledge of child health problems to completely revolutionize the tables of child mortality. There are thousands of children who will die this year because what you know has not been broadcasted effectively over the land. There are millions who will be started wrong, who will grow up with handicaps, weak of eye, dull of wit, with twisted bodies and wrecked lives, because they are just strong enough to live—to survive the handicaps put upon them by ignorance. And the tragedy of it is that an enormous per cent of that younger generation might have been saved if they could have been reached in time by you.

There is a prosperous milk-producing county just outside of Chicago where there is no excuse for underfed children. We visited one of the farms recently and noted four washed out, dull eyed children, playing round a very fine car which was manufactured right here in

Detroit. It is the kind of car that denotes either prosperity or bankruptcy. A sickly, yellow skinned baby lay in a bassinet on the porch. The mother was sitting nearby, drinking tea. Mrs. Medill McCormick, who has done so much good work for clean milk in her State, said, "I suppose you also give the baby tea."

"Oh, no indeed," corrected the mother, "he gets his cup of coffee in the morning like the rest of the children and he seems satisfied with that."

There are millions of such mothers, and there is only one way to help them—expert knowledge plus health education whose twin brother is publicity.

I should like to take occasion here to congratulate the American Child Health Association upon its plans for the Division of Publications.

With the genius of Miss Jean, you have already accomplished great work, but I feel about this Association at this time much as the Pennsylvania Dutch farmer felt when he bought his clock. He visited the clock store three times before he made his purchase. He had his eye on an eight day clock but it cost seventy-five cents more than he wanted to spend. But he finally succumbed to the temptation.

"Gosh," he said, "if it runs eight days without winding, what will it do if you wind it up?"

You are wound up now, and we are expecting you to surpass all records.

THE IMPORTANCE OF PUBLICITY

I want to give you an illustration of the importance of publicity. It happened in our own Better Homes Campaign this year. There is an important city in the middle of the United States which, because of its failures, shall remain nameless. They put on the campaign. They had a perfect house, one of the best shown in the whole country. It was attractively furnished. It was sufficiently equipped. Its nursery was a model. It had a budget for the home maker. It was an important exhibit. It might have been of importance to the entire nation, but it wasn't even known to a half of one per cent of the people in this town. The explanation is, their publicity was a failure. Yet the campaign was needed in that town—there were women eager to see a demonstration.

In contrast to this town is Port Huron, Michigan, which won the first prize in competition with 1,002 other American cities.

If you have lost faith in the younger generation, you should know what happened in Port Huron.

The Woman's Club had a full program and could not sponsor the movement. The Chamber of Commerce refused to back the campaign unless the Woman's Club would undertake to do the work. We then wrote to the Board of Education and finally the letter fell into the hands of Miss Elizabeth Carlyle, Director of Civics at the Washington Junior High School. She undertook the responsibility for having her class—the graduates of 1923—put over the Better Homes Demonstration week in Port Huron. These youngsters, all under twenty, took on this work as a class job. In the beginning, they had a little difficulty getting support. There were some people who complained that this generation are only wasters and excitement eaters, just flappers, and that they never finish a job. The Junior High School of Port Huron took the challenge, and they made good. It costs money to put on a campaign, and they raised it. They had a voting contest on the best mother in Port Huron. It cost five cents to vote for Mother. Every boy and girl, most of the men and women, voted for their own mothers until they saw it was useless, and then the voting became a serious matter; there was a lot of thought given to just who was the best mother in Port Huron. The Newspapers were bombarded by the boys and girls, and they gave publicity to this ingenious project. Enough money was raised to run two campaigns. Then a questionnaire was sent out to find what the young people of Port Huron wanted in their home. It would have cost \$30,000 to build the composite desires of the young folk of that town. The Class in Civics eliminated non-essentials, and shaved it down to a \$5,800 house. They found a good architect. The cost of the house was underwritten by a public spirited woman, the ground was broken and all the city officials attended. The house was finished, furnished, equipped with all necessary labor saving devices, a car was put in the garage, the best mother in Port Huron was put in the living room, and the High School girls worked in the kitchen. They kept that house open for one week and 48 per cent of the population passed through it.

The public knew all about the Better Homes Demonstration House in Port Huron. Newspapers published articles about it every day. Posters were put up on every street. Merchants were asked to include the mention of Better Homes in all their ads. All the churches had ceremonies on this subject, and in every moving picture show in that town, five minutes were given to some bright faced youth who came bearing the message of Better Homes.

Mr. Hoover, as Chairman of the National Council, awarded the first prize to Port Huron.

There is another story I want to tell you which has a direct bearing on Publicity.

A few years ago one of our most distinguished child specialists crossed the continent to give a series of lectures on Pediatrics. He was twelve days on the train going and coming, and two weeks at the University.

I wanted to publish those lectures in the *Delineator*. He said that he could not consent to that. Oh, no, it wasn't done. What would the rest of the profession think? It would be misunderstood.

Now, people are people, whether they are at Berkeley, California, or in Kansas. There was only one difference—several hundred students heard the lecture at Berkeley—and a million mothers might have read it in the *Delineator*.

That spirit in the Medical Profession has passed. The new ethics demand public education, and publicity is its largest medium. There are many roads to success. We like to trace them. Recently I was talking to one of the most successful business men in America. He has made his millions, earned a reputation for public work, and is said to have made a president of the United States. I asked if he thought there is a Royal Road to Success.

"There certainly is," he answered. "It is this. Get the best stuff in the world and then don't be afraid of anything—just shout your head off."

You have in your field what are admitted to be the best minds in the world. Now shout—and God bless you, for the world needs what you have.

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PROBLEMS OF STATE AND CITY CHILD HEALTH OFFICIALS

Special Session for Governmental Groups

J. H. MASON KNOX, Jr., M.D., Director, Bureau of Child Hygiene, State Department of Health, Baltimore, Md., Presiding

Dr. Knox: In considering the varying problems that immediately confront city and state child health officials, it was determined to fix attention at this session upon the two which are perhaps most fundamental, namely, "The Rural Mother—Effective Methods of Increasing Her Interest and Cooperation in Improving the Health of Her Family," and "The Pre-school Child."

All of us who have had experience in attempting to save the lives of children in country districts realize that we must depend upon the interest, intelligence and cooperation of the mother. In this regard, the cities are considerably ahead, but there are many methods used which are not applicable in rural work. We feel, therefore, that the subject of the rural mother should be presented by one who has given to it particular attention, and who has suggested some practical methods of interesting the rural mother in her own health and in that of her children.

THE RURAL MOTHER—EFFECTIVE METHODS OF IN- CREASING HER INTEREST AND CO-OPERATION IN IMPROVING THE HEALTH OF HER FAMILY.

**EVERETT C. HARTLEY, Sr., M.D., Director, Division of Child Hygiene, State
Board of Health, Carver, Minn.**

It shall be taken as axiomatic that a mother is interested in the health of her family. It is taken for granted, too, that there are all grades of variation in this interest; but its presence, in some degree, must be granted all those above the grade of moron—as must also its expression in some form.

It is worth while, in the application and selection of effective methods of increasing this interest, to consider the various items of which it is composed, and upon which an understanding of its appeal must be based. The endless repetition of the saying that good health is valuable, has robbed the truth of its vitality; it is too often merely a phrase whose parrot-like recurrence takes from it every quality of the conviction and inspiration with which it is naturally so richly endowed. Exactly what is meant, then, when we go to the rural mother with the object of increasing her interest in improving the health of her family? Why should she be interested in improving the health of her family?

There are several consequences of good health conspicuous enough to interest a mother in the condition which may offer them:

1. Good health improves the appearance of her children. Glossy hair, clear eyes, sound teeth, a clear skin, an erect posture, and that sound, well-nourished appearance which goes with good digestion and well-functioning metabolism—these attributes of health in her children must be pleasing to the eye and heart of any mother.

2. The usefulness of her children is increased and their disposition is improved. Generally speaking, the tired child, or the irritable, whiny or lazy child, is not functioning properly, either because of unhealthy habits of living and eating, or definite physical faults. Healthy children are active, busy and full of curiosity.

3. Healthy children are generally alert and bright. Their school work is better than that of the faulty child, largely because their native intelligence can work unhindered by physical faults which react upon the child's capacity properly to hear, see, or focus attention upon the task set before him.

4. Unhealthy or weak children are a source of worry to their mothers. The future of such children is also a problem, and increases the concern which their present condition arouses. Forever unexpressed, the pride of a mother in a weak and unhealthy child must suffer and can never compare with that which she must feel in a strong, alert and vigorous child.

5. A healthy child is much cheaper than an unhealthy one. There is not only the direct saving in doctor's fees and other incidental costs of treatment, but there is the saving in time and additional work to both mother and father.

These are some of the more obvious appeals which good health makes to a mother.

In this connection, it usually follows that a mother who has been definitely interested in the health of her own children may be more readily interested in the health of her community. The same motives which have perpetuated herb remedies and senseless superstitions will act in spreading sounder health teachings—indeed, they will be increased by the greater authority attached to them, and by the demonstration of a more definite and certain return.

HER OWN HEALTH

So much for the appeal which the health of her actual family may make to the interest of a mother. Upon what grounds may we base an appeal to an interest in prenatal care and maternal health?—for this question has a very direct bearing upon the health of the family.

1. In whatever degree a woman is possessed of "mother love," the feeling is probably at its height in the expectant mother—particularly in those who are about to become mothers for the first time. The phrase, "Every child has the right to be well born," will have its fullest meaning to her at this time, for it will fall upon ground made fertile by ideals and hopes unmarred by the actualities of later years.

2. The expectant mother, to a varying degree, fears the prospect awaiting her in the birth of her child. It holds for her a possibility of invalidism—perhaps death. This fear is not only natural—it has an excellent statistical basis. This factor is especially strong where the expectant mother already has several children. In her case, her fears are all for her children—that she may not be able to stay and take care of them and see them safely grown.

3. The expectant mother is concerned over the effect which motherhood may have upon her personal appearance. This natural concern

also has a basis in fact—although in later years it may become a martyr-like alibi for ravages whose real cause may often be found in physical inertia and indulgence.

4. An appeal to the intelligence of a person need not be in vain. Women have a curiosity as to the nature of the process which transforms them into mothers. Until recently, the only answer to this curiosity has been the current superstitions and the "Family Doctor Book." For the new knowledge in maternity we have found a very wide demand, prompted, in many cases, solely by a desire for greater understanding. The extent of a woman's formal education is no guide in determining the existence of this curiosity. We have seen greater mental inertia in university graduates than in almost illiterate farmers' wives.

These few appeals to the interest of a mother in the health of her family are, of course, no end in themselves—neither, for that matter, is the health of her family. The family's health is only one phase—although an extremely important one—of the ultimate purpose of a mother, and that is to give to her family some basis for happiness and some equipment for usefulness to the community.

By what agencies may these appeals be brought to the attention of the mothers of our states? We are all quite familiar with these agencies, and I shall merely enumerate some of them which do useful work in Minnesota:

1. Parent-Teacher Association.
2. The Federated Women's Clubs.
3. League of Women Voters.
4. State Advisory Board in Maternity and Infancy, and County Administrative Boards.
5. Farm Bureau.
6. Church Clubs.
7. Ladies' Aid.
8. The W. C. T. U.
9. The Medical Profession.
10. The Nursing Profession.
11. The State University Medical School and Extension Division.

The first three of these are state-wide organizations and each has health committees in whose activities it is always possible to include such health projects as affect mothers and children. The smaller local groups are always ready to take up educational work or to arrange for local health demonstrations. The Advisory Board in Maternity and Infancy and the County Administrative Boards are expressions of the tendency becoming more and more common in all states toward an

endeavor to secure a local interest and local administration for health work. The State Advisory Board is composed of nine members, and the County Boards, of five members. Women and physicians predominate on these boards, the idea being to secure for the boards a strong personal interest and adequate technical supervision. The formation of such boards, particularly the County Boards, is a slow process and the process by which they become well functioning bodies is still slower. This is to be expected, however, and should in no wise detract from the ultimate value of this method of administration.

The actual means and methods used in interesting rural mothers in improving the health of their families ought to be arranged, as far as possible, as an answer to the hopes, fears, worries and difficulties of a mother, whether expectant, or actually engaged in equipping a family with a basis for good citizenship. Furthermore, such measures as are used must be definite, concrete and practical. The ability to recognize and understand abstract truth is extremely rare. If one wishes it accepted, his task will be easier if the truth can be demonstrated, its usefulness and practicality shown, and the whole procedure made so simple and serviceable as to be convincing in itself, without the aid of argument or too much exposition. A mother's daily life is too filled with definite and time-consuming work for her to be greatly impressed by theoretical discussions of health methods. The sterile obstetrical package is more eloquent than the obstetrician, and a demonstration of the preparation of infants' food is more convincing than any argument for better feeding methods which the public health nurse may advance. This need not necessarily mean that any efforts at more academic methods of instruction must fail; it merely means that such methods must be supplemented by practical demonstration sufficiently to fit them into a practice rather than into a theory.

OPPORTUNITIES FOR INSTRUCTION

A rural mother may be reached either in her home, or at meetings in the district schoolhouse, or in the nearest town. Those who see the mother at her home are the physician, the public health nurse, and neighbors. The first two are equipped for health teaching—the neighbor will try to teach in the measure in which she herself has been taught. In public, the mother may visit clinics or bring her children to them, she may witness demonstrations, she may hear lectures, or see health motion pictures. What definite, concrete health methods may she receive, see, and learn at these home or public meetings?

1. During home visits, the doctor or public health nurse may either provide the mother with suitable literature, or show her how it

may be obtained from the State Board of Health. Literature so obtained comes as a reinforcement of actual directions or demonstrations, and is more valuable than when it is obtained—so to speak—without context. You are all familiar with the types of bulletins available from the Federal Bureaus. Practically all states have additional literature of the usual pamphlet and folder type, as well as the more specialized forms, such as the Prenatal Letter series for expectant mothers.

2. Both doctor and nurse may indicate how methods of preventing the spread of infection are being overlooked—and how such infection should be controlled. With an object before them—as in an infectious or contagious disease—to demonstrate the method, and fear to emphasize it, the opportunity becomes an excellent one for the teaching of effective health methods. The kitchen stove is not only a device for cooking—it is also an incinerator and a sterilizer. It is becoming more and more the custom for public health nurses to show how the equipment of even the most ordinary of homes is usually adequate—if properly used—for the more common demands of home nursing and care of the sick. Most people admire adaptability and ingeniousness; such attributes are as serviceable to a mother as they are to a Boy Scout or a Campfire Girl.

3. There is a very great deal of literature on the subject of infant feeding. To a large extent, this requires the interpretation of actual demonstration before it can be understood and used. Many doctors and nurses can prescribe a feeding formula, but how many can show a mother how to prepare it? In Minnesota we have conducted demonstrations in the actual preparation of infant foods in conjunction with infant clinics. Judging from the interest shown in them by mothers, these demonstrations filled a very definite need.

4. Most rural mothers make no adequate preparation for confinement. This is due, partly to delay, and partly to the fact that they often do not know what or how much to prepare. Any method which would tend to overcome this shortcoming would necessarily make a definite contribution to better obstetrics. In Minnesota most of the doctors are co-operating in a scheme whereby expectant mothers may provide themselves with all the materials, ready sterilized, needed for a normal confinement in the home at a cost of \$2. In each community, women's clubs are stimulated to make and sell these packages.

5. Correspondence Study Courses and "Little Mother" classes are among the most economical methods of bringing health teachings to the rural mother—as well as the most stimulating and effective. With these methods, the process is not so much one of teaching as it is of making a teacher; and the teacher is not only made, but is given an

important position at once. She becomes a friend in the camp of an enemy. And of all health teachers, she is most likely to include some health work with her health talk, for her activities are at the end of the chain—she is with the group of ultimate consumers where propaganda ceases and action begins if there is ever to be any action. One conspicuous advantage of these methods is that they give a fairly comprehensive view of health, its requirements, nature, etc. They are free from the shortcomings of such single, largely symbolic methods as, say, a toothbrush drill—an excellent measure in itself, but certainly not the royal road to health it is sometimes designated. Health teachers who try for emphasis by forgetting comparative values ought to be reminded that their audiences—child or adult—will probably have the sense their teacher lacks, but unfortunately they usually will end by abruptly including in their judgment of “foolishness” not only the teacher, but the whole subject of health as well. It is at this point that the folly of lay workers in health subjects is most apparent. With their lack of proper health education and consequent lack of comparative values, such people often speak with a dogmatism and an authority which has little basis other than that feeble one furnished by good intentions. Good health, broadly speaking, is the result of persistent attention to one’s physical life, just as wealth and position are the result of persistent attention to one’s intellectual life; both have their exceptions which may prove the rule, or serve as witnesses to the limitations of human explanations.

DISCUSSION

Frances S. Bradley, M.D., Director, Bureau of Child Hygiene, State Department of Health, Little Rock, Ark.: The rural mother, while a reserved, inarticulate person, is yet thoughtful and sincere. She is less sophisticated than her city cousin but is more credulous and open to conviction by reasonable argument.

The best possible argument is to show her, in a tactful way, on her own children, where she is succeeding and where failing to secure such results as practically every woman wants to accomplish.

She cannot be expected to know the significance of a sweating head, of a prominent forehead, or the condition of the fontanelles. Winged scapulæ, a hollow chest, pronated ankles, poor teeth, distended abdomen, lack of discipline and irregular habits, mean nothing to the average rural mother. She is responsive however to the efforts of an understanding person who will show her the importance of intelligent, methodical management of her household; of right habit formation; of better feeding; and her need of medical supervision and instruction, including periodic examination of her children.

When she realizes that simply a four hour nursing interval for her baby will greatly facilitate the accomplishment of her household duties; when she sees the value of teaching Johnny and Susie and the rest of the family to be resourceful, self-helpful and orderly; when she learns that it is just as cheap, and just as easy, to bake, boil or broil as to fry everything from bread and meat to pie, and more

appetizing, so soon will she learn to solve her special problems and to substitute effective management for the endless drudgery that has heretofore been her lot.

One of the best means of increasing the interest and cooperation of the rural mother is by means of the rural school. More and more this is being recognized as a community center, and the mother accepts it as a source of instruction for herself, as well as for her child. It is common ground upon which parent and teacher meet for discussion of all that concerns the welfare of the child. Therefore, in a rural state, we would urge the organization of parent-teacher associations.

Next in importance I would place the county federation of women's clubs. These bring together men and women from adjoining towns for comparative study of their problems. The child, being nearest the mother's heart, comes in for his share of attention. In this way active and worth while groups have been formed, involving the increased interest and cooperation of both mothers and fathers.

The home demonstration agent is an invaluable aid in stimulating interest and cooperation in securing better health conditions, especially in the feeding of the family, and in acquiring household conveniences so that the mother may devote more personal attention to her children.

Naturally the public health nurse is our most valuable ally, but unfortunately she is almost as rare in some of our states as the public health doctor. Consequently we are largely dependent upon lay activities with such absent treatment as may be given in the form of inspiration and guidance from headquarters.

Mary E. Brydon, M.D., Director, Child Welfare Bureau, State Board of Health, Richmond, Va.: It gives me great pleasure to discuss Dr. Hartley's paper on "The Rural Mother." I should like to stress just two points: the importance of educating the rural mother in health, and the necessity for a clear conception on the part of the health educator as to the kind of education she needs.

The big outstanding need today of any class of people, high or low, rich or poor, is education. To no group of people is education more essential than to the mothers of young children in our rural communities, mental, spiritual and physical education.

To a great extent, a mother in a rural district is isolated; schools, in many instances, are inferior; churches are far apart; ministers are scarce; and doctors are far too few. Very probably she never attended school, and if she did, she probably dropped out at the third or fourth grade; therefore, her capacity for learning in many instances has not been developed further than that of a ten year old child. She cannot return to school and continue her studies; she must get all her knowledge from the school of experience, or from such helps as filter in from various sources, such as church papers, farm journals, state and national bulletins (and she reads few of these), and the far too seldom visits of ministers, home demonstration agents and health workers.

Statistics show an unnecessarily high death rate of mothers in childbirth and of children under one year. Physical inspection in the schools brings to light numerous cases of preventable defects among school children.

In order to correct these conditions, a few states have letters to send the mother in regard to the health of herself and her children.

Virginia is trying to help by offering a correspondence course to mothers which will cover the essential points in prenatal, maternal and infancy welfare. This course, which consists of two parts of six lessons each, is being given publicity through circular letters to ministers, doctors, nurses, sanitary officers, W. C. T. U. organizations, women's clubs, midwives, superintendents of schools, home demon-

stration agents—in fact everybody who comes in contact with the rural mother. We hope eventually to get every mother, intelligent and otherwise, to take this course, and thus avail herself of information in this branch of health education.

The other point I wish to stress is in the form of a caution to all who are carrying information to this usually overworked person—the rural mother. She has a many-sided proposition to handle, and what she needs is instruction and advice in organizing her work so that her time and strength may be conserved. She should have such assistance as will leave her with an increased feeling of responsibility towards the working out of her own problems.

I should like to direct the attention of these workers to the following “Job Analysis of the Rural Mother,” whose interests as a home maker might be divided as follows:

1. Her husband's demands.
2. Cooking for the family.
3. Sewing for the family.
4. Buying for the family.
5. Cleaning her home.
6. Washing and ironing for the family.
7. Farm chores.
8. Her own health's demands.
9. Bearing children.
10. Nursing the baby.
11. Her recreation.
12. Social duties in the community.
13. Her spiritual needs.
14. School demands of her children.
15. Church demands of her family.
16. Moral and health training of her children.
17. Nursing in times of sickness.

A close inspection of her “job” will bring out the fact that the rural mother has about seventeen different “interests,” any one of which could, not only engage her whole attention, but be developed as a specialty. Should her outside sympathizers and helpers insist upon her developing herself along any one line more than another, she will be placed in the uncomfortable position of being over-trained in one direction and under-trained in another—her mental attitude towards her work will be confused, and, consequently, much of her work will be neglected.

Every health worker who comes in contact with the rural mother should bear this fact in mind. He should be broad enough, while stressing his own particular interest, not to ignore her other interests, and should leave her in a fairly well-balanced state of mind, better able to adjust her problems to meet her own particular needs.

Miss Marie Lockwood, Superintendent of Nurses, Health and Welfare Commission, Dover, Del: I would like to speak about a rather interesting piece of school work we did in Delaware for child welfare last winter and the fall before. We examined the children, and all those who were a certain percentage under weight were referred for home visiting and also to the home economics teacher. I feel that we ought not to wait for the normal school girl. A great many of these girls will never go to normal schools, and we could begin some of this work with the high school girls, as we did last year. The high school girls took those sub-normal

weight children in hand. They were weighed weekly, first by our nurse, and later, by the home economics teacher and her class. The high school girls interested themselves in the children's diet. They talked with the children, they gave talks in the schools, and helped prepare the hot lunch for this group. The mothers became interested in the girls who were giving these demonstrations, and of course in their own children's improvement. We found a splendid response from that wonderful demonstration.

Although we conducted this experiment for a short time only, we have secured real results from it. I believe that every one of those high schools girls is a potential teacher. If she does not go on as a professional teacher, she will be a teacher in her own home. We have set girls thinking who never would have had the opportunity in any other way to know that there were dire results from undernourishment and improper feeding. Moreover, they, themselves, demonstrated the simple means of correcting much of it.

Mrs. Jean Dillon, State Department of Health, Charleston, W. Va.: We all agree that putting health education in the normal schools is a splendid thing to do. I also agree with Miss Lockwood in regard to putting this sort of teaching in the high school, which is a still more splendid thing to do. However, in our state, and in a great many of the other states that are represented here, too, many of the girls do not go through the high school. These are the mothers of more than their average of children. Therefore, unless this teaching goes into the seventh and eighth grades, we shall not reach the majority of our mothers. We have sufficiently demonstrated in our state that this can be successfully accomplished, and I know that some of the other states have done likewise; but I believe that we have only made a start on such teaching.

One of my neighbors suggests, Why are we talking only in terms of the *mother* when we are thinking of child welfare? Let's give the father the same sort of instruction, too.

Dr. Ada E. Schweitzer, Director, Division of Infant and Child Hygiene, Indianapolis, Ind.: Confirming the thought that has just been voiced, I think that the father is being left out too many times in discussing child welfare. An illustration may be helpful.

We were working in a child welfare conference one day in a community where two babies of almost the same age were brought to the health conference. The first mother brought hers early because she was a member of the conference committee, and she wanted to have the examination finished before her heavy duties began. The baby was happy throughout the examination and was found to be healthy in every respect. The mother said, "I have had perfectly wonderful co-operation from my husband in raising this child. He is a graduate of our state agricultural college. He knows what a balanced ration for stock means. He knows that certain foods ought to be fed at certain times, and any suggestions I have to make with regard to the care or feeding of this child, he always co-operates in." The other mother came in with a baby that obviously was not well. She said, "I am going to ask you what you would do if you were in my place. My husband is very fine and is kind to me, but our mother-in-law is living with us and when I do not feed the child at the time she thinks it ought to be fed, she objects and says that I am starving the baby. She has objected so much and so frequently that my husband has finally, in order to keep peace in the family, decided to side with her. Now, if the baby cries at night, I must feed it whether it should be fed or not. I know

it should not be fed so often, but what am I going to do? The grandmother says if I do not feed it when it cries, she will, and she would probably give it something much worse than I would give it." I said, "I don't know what you will do, unless you give the grandmother a vacation." This woman did not need education but did need assistance with a family problem.

I went into the next room where the grandmother, a militant person, was resting and she said, "I would like to ask you something. What makes that baby jerk and cry at night?" I said, "I suppose you know that if you eat a great deal of food at night, you do not rest well. I would suggest your baby is being fed too often and probably being fed too much, or fed things it can not possibly take care of, and that may be the reason why it is so restless at night." She seemed to think that I had been coached, because she very promptly resented what I had said.

We have in many places a rural mother who knows how she should bring up her family, and has the facilities at hand. These rural mothers are doing splendid work and are able to help their neighbors. Then again we have the rural mother who has all the facilities at hand but does not know how to use them. She needs to be taught. We have another rural mother who could have all the facilities but she does not even know what she should have. Very frequently I have asked, "Do you give the children vegetables?" The answer often is, "No, we don't care for them in the family, and we don't raise them in the garden." I reply, "If you are going to raise children, you certainly ought to raise the kind of vegetables children need. If you want better babies, you must have better gardens in order to feed your babies correctly."

Dr. Elizabeth Ball, State Pediatrician, Springfield, Ill.: Illinois has been trying the experiment for the last year and a half of holding better babies conferences right in the rural communities. Upon request, a doctor and a nurse are sent to the community for a period of one or two weeks. The doctor and nurse go into the townships, to every part of the community, and examine as many children as possible, especially of pre-school age. If time permits, we even take as many as possible of the school age children. Then each mother is given a private consultation and special advice relative to the case. A general meeting is held in the evening and a talk is given on nutrition, health, and so forth, and discussion is encouraged. We find mothers asking many questions. The results we see as we go back into the territories tell us that a great deal is being accomplished.

Dr. Knox: I was impressed with Dr. Schweitzer's remarks about some of the rural mothers in Indiana. Unquestionably there are some prosperous sections of the country where the rural mother is better cared for than the average city mother. Some of these places have excellent facilities at their disposal, adequate medical attendance, health conferences, etc., but unfortunately these areas are most exceptional. It would seem to me important in establishing adequate care for the mothers and children in country districts that we develop a community conscience which will concern itself with the health of all women and children who now are not adequately guarded, so that the well-to-do mothers in these communities whose children are healthfully reared may make themselves responsible for securing correspondingly healthy conditions for those other mothers and children in the same community who do not have them.

THE PRE-SCHOOL CHILD—PRACTICAL METHODS OF SECURING MEDICAL EXAMINATION AND SUPERVISION

MARY BIGGS NOBLE, M.D., Chief, Division of Child Health, State Department of Health, Harrisburg, Pa.

Almost everything has been said that needs to be said to lead us right up to the main point for both the state and local health officers. We want to know *how* this thing is going to be done, which we all realize must be done. I only hope to crystallize a few things. There has been no program made by anyone which can fit perfectly into every situation, and I do not believe we are going away from this meeting feeling that everything has been settled. I wish I could feel that way. However, I do think we can crystallize a few things showing where our greatest difficulty is.

There are three things that we must achieve in the pre-school period. We must get physical health habits started in the little child and we must start good mental health habits—I am making two habit groups there. We must discover all defects that are discoverable, and this must be done by a person who can use scientific training to find them out. Those three things are what we must do for the pre-school child.

We have said that the parent-teacher association can get it all done; that the W. C. T. U. can be used; that certain county organizations can be employed; that we can use the health demonstration agent and the agricultural college, and divisions of certain universities. Those organizations are assuredly available, but not a single person has told us how to get the parent-teacher association *started*, or if so, I have missed it. I am not thinking in terms of the city, but of the rural area. The parent-teacher association does not exist at all in many rural communities, and will not for many years. The W. C. T. U. often includes the best workers in the county, and in at least one of our counties, it is a strong organization of *young* childbearing women. The rural mother is the one I have in mind, and when I am told that an organization must get to her and teach her what to do, I am floored. Who is going to get the organization started on this untrodden path?

Virginia seems to have come the nearest to solving the problem of getting these things over to the parent. The mother must be taught through some channel which she will be willing to recognize as a rea-

sonable one for this information. There is not an immediate prospect of more ideal conditions, but with education now compulsory in almost all states, it would seem reasonable to look to the schools for help. Then I hear you voice your sympathy for the overworked teacher. Can we ask her to do any more? I do think our normal schools can train the teachers in health education in such a way that it will not increase their burdens, but on the contrary, will lighten them. We have not the perfect formula yet, but we are on the way to it. I think we are on the way to it in Pennsylvania where we have nine million people, and chiefly living under rural conditions. I think the teacher is the one who is going to get into the home through her own personal visits. Also, it has been said two or three times, that the children are going to take much back to the mother. We are going to use these ways in the next few years to start the mother's interest in the pre-school child problems. I want to be told if I am wrong about this. I do not want to add to the teachers' burdens.

In Pennsylvania we have a health educational program so that when those who are at present normal school students, go out as teachers, there will be more "doing" in all our schools. I believe there is a law enforced in some states concerning home visiting. But law, or no law, no real teacher can conceive of her job as being done when she closes her schoolroom door. So many times a year, at the minimum, she goes into the home of each pupil. It is the teacher in the one-room school, or in the consolidated school, who needs consideration. There is often a wide area from which the pupils come, and a trip to a distant home means a whole day, or if more than a day, the teacher must take a weekend for it. On such visits, she can impart to the mother in the home knowledge which she has gained in her normal school course.

I think that medical *inspection* in the Virginia sense should be quite possible for any lay person of average intelligence. The three or four little essentials which have been named here, the mother herself should be able to detect after the teacher has shown her how, e. g., what is right posture, watching the weight, etc. The teachers will know a great deal more about little subtleties and will make discoveries which the mother could not make, and undoubtedly certain kinds of inspection can be undertaken better by trained teachers than by our mothers.

One other organized force has not been mentioned this afternoon. In Pennsylvania we found another organization to enlist and it has proved to be most useful. I refer to the church, the Protestant, Roman Catholic and Jewish Congregations. There are no people who look

after their families as the Roman Catholics do. There are no people who look after their children, in the matter of bringing them up in the right way, better than the Jewish people. In the Protestant churches—I happen to know them best—every baby's name is supposed to be listed on the "Cradle Roll," and it is the only organization of babies that exists. We have never thought to use it until just within the last year. Priests, rabbis and pastors are helping us to "get over" the health ideas. I think you will agree with me that it is one of the most logical and best methods for the advancement of our work.

Now, there is just one other thing that seems to me fundamental, and it goes back further in the bringing about of certain results than anything else. We now have compulsory education and every child is supposedly in school. The majority of the children go through the eighth grade and on into high school. Even in backward states most children go through the eighth grade and more and more are going to the high school. The children can, and must, be taught mothercraft and fathercraft for the future home making. They will marry within a very few years, and fatherhood and motherhood stand right ahead of them. They can be taught even as early as the seventh and eighth grades the care of little children and about the "beginnings of life," and the "science" of making a home. The little girl starts with caring for her doll, and from that, it is just a step in mothercraft to the actual care of a child. I want to live to see this training begun in the seventh and eighth grades in all the schools, and amplified in high schools, normal schools and colleges. When the next generation of children is brought into the world, we can hope that no part of childhood shall be neglected. If our educational systems, departments of health, and departments of public instruction will work together to that end, we might get things done in the next *ten* years!

DISCUSSION

Walter H. Brown, M.D., Medical Director, Child Health Demonstration, Mansfield, Ohio: I like to think of this problem as having two sides, dealing with the mother who is now working at her job, and with the potential mother. Manifestly we must go down as far as possible into our educational system with this preparation for fatherhood and motherhood so that it will catch the boys and girls who are to be the future fathers and mothers.

We, at Mansfield, are doing some interesting work in the high schools, to which all the children must go. We are giving a course in home making. We are imparting some of the information that it is desirable for the future mother to have.

I should like to discuss briefly several sides of Doctor Noble's paper. I have heard a great many plans outlined whereby we are going to get all of the children and care for them right straight through. When you examine some of these plans, you find that after three or four months of work, or perhaps a year, the net result is that seven, eight, or ten things have been taught to forty or fifty children. One

of the fundamental requirements, if we are to do anything with the pre-school child, is to get the child so that we can do something with him.

This afternoon we have heard something of the larger centers of population where the kindergarten, the day nursery, and nursery schools exist, but the speaker did not touch on the great stretches of rural territory in which these advantages are not provided for the child. This means that we shall have to find other ways to reach this group. You will want very definite advice on methods of finding out where they are. In most cities, counties, and rural districts, we have the school census. We used at Mansfield a sickness survey; sometimes we have to go back to the birth certificates for information. In other words, we want to know how large a problem it is, where it is located, and what we are going to do about it.

Then I want to emphasize a point that Doctor Noble touched upon very briefly, namely, that as soon as we think about organization, we usually have in mind a new organization. We consider finding a way of organizing for this particular object. My reaction to this aspect of the question is that, until we have explored the potentialities and the resources that we have at our command in the organization way, I do not believe we should think in terms of new organizations. Here is Dr. Noble pointing out to us that for a long time we have been wishing to get hold of certain groups of population. We have a natural, normal social group in the church and we have not used its resources.

I would point out the other factor that I feel is of great and growing importance in your rural areas, your farm bureau. I know of no organization whose present methods are better fitted to get over the technical message that we wish to get over. These bureaus are, in fact, picking out for themselves their local leaders and bringing each to a central point where she is trained to go back and take a small group of her own neighbors and carry that message to them. This is one of the most economical and effective social devices, I think, that we have been able to develop.

In our work at Mansfield we are penetrating into the home through the school health examination. I do not know whether in your community that is the right way to do it, but I do know that through getting the school health examination started, we were able to use the same farm bureau machinery, plus the medical profession.

While I am on this subject, I wish to call your attention to one habit of dealing with the medical man. I have not been practicing medicine for some time and I do not think that anybody can charge me with having any particular brief for the doctor who wants to stand in the way of public health work. We lay our plan and we set it all down on paper, one, two, three, four. We must secure the cooperation of the medical profession, and we have it all worked out. We go to the medical man and say, "Doctor, we want to get your cooperation. This is the plan. You are going to do number three." If we are to feel that any plan is effective as a medical group, we have to grow up with that plan. So may I say to those of you who are dealing with the rural doctor that he is just as human as any of the rest; that he will go just as far as you will in trying to help solve these problems. But you should go to him and educate him, not after you have your plan, but while it is in the course of formation. We have been able in one particular piece of work to secure not only the health examination of a considerable number of pre-school children in the rural area, but also medical participation by the local physicians in association with our own trained man. We are thereby doing two things at once in promoting the growth of the local group, making them

feel that it is part of their job in the future to do some real preventive work among children, and at the same time educating them to the new standards of what the work should be.

While there are many devices which will need to be worked out in this pre-school problem, I do think that we should first exhaust the resources of our own community and readapt to the rural areas those things which we have proved in the laboratory of our larger centers.

Blanche M. Haines, M.D., Director, Bureau of Child Hygiene and Public Health Nursing, Michigan Public Health Department, Lansing, Mich.: In the more rural communities outside of the cities of Michigan, we are partially meeting this question through the examinations made at our infant and pre-school children's clinic which is a unit of the Health Institute, a feature of the Michigan Department of Health. From September 1, 1922, to August 1, 1923, there were 198 of these clinics held in the state. At the 198 clinics, 3,868 infants and pre-school children were examined. Of these 3,868 children, 2,176 were pre-school children between the ages of two and six years. The remainder, or 1,692 children, were less than two years of age. 4,652 defects were found in the 3,868 children examined. A partial tabulation of defects in relation to ages was made of the first 418 pre-school children examined.

Underweight was present in 23 per cent of all the children examined. The age showing most underweights was four to five years.

Defective teeth were present in 33 per cent of all the children examined. The age showing most defective teeth was between five to six years.

Defective tonsils were present in 41 per cent of the children. The highest incidence was between four and five years of age. Postural defects were present in 8 per cent of all the children, and were most numerous between five and six years of age.

Evidences of rickets were present in 11 per cent of the pre-school children and the highest incidence was between two and three years of age.

The percentage of defects by ages easily led in numbers between the ages of four to five and five to six years. The tabulation of 418 pre-school clinical examinations was made in February, 1922, and in March we circularized the organized groups of women in the state. We enclosed with our circular letter a tabulation of the results of the examination of 3,125 children between two and seven years of age made at Gary, Indiana, by Dr. Anna E. Rude of the Federal Children's Bureau. The letter advised that the pre-school children who would enter school in September should be taken to their family physicians for examination or that clinics should be held for them in June, in order that any corrections that were needed might be noted and made before they entered school, and thus they might start their school life as free as possible from physical handicaps.

The demand came for additional clinics, and 73 more were held by other physicians in the bureau beside the pediatrician with the infant clinic of the Health Institute, with the result that 1,719 more infants and pre-school children were examined at occasional clinics or conferences.

At our permanent Mother and Baby Centers, 7,048 infants and pre-school children were examined, at centers reporting after January, 1923, making a total of 12,635 infants and pre-school children examined during the year in the state, outside of the cities of Detroit and Grand Rapids.

We are unable to state how many were children between two and five years of age who were examined at centers, but if the ratio was the same as in our traveling

clinic it would be considerably more than one-half or nearly two-thirds of the entire number seen, making approximately 7,000 pre-school children whose defects have been recognized and whose mothers have had instruction in their care and diet. How many more pre-school children who entered school in September of this year were taken to their family physicians for examinations, advice and corrections as a result of our circular letter sent to women's groups, we are unable to say, but no doubt, some of the more than 2,000 letters sent out bore some results.

No therapeutic or remedial work is done at our clinics, conferences, or centers. Our work is wholly diagnostic and educational. The policy emphasized is a "Keep Well" policy for infants and pre-school children, as well as adults.

However much we may do for the pre-school child to emphasize the early recognition of defects through periodical examinations and their corrections when found, we must acknowledge that the root of the matter lies deeper in the habits of our people. Lack of discipline, unbalanced diet and unhygienic living, all contribute to the development of the malnourished and underweight child, which begins a vicious circle which in turn contributes to the development of other defects.

American parents as a class are not insistent on parental authority and the wisest course; consequently the American child eats and does pretty much as he pleases and often as a result is undernourished. Among our foreign born, dietary habits and standards vary with the people. One-fifth of the total population of Michigan is foreign born. We cite one group only. Michigan has more Finns in its borders than any other state. They are mostly an agricultural people, yet they do not have gardens. Green vegetables are not grown by them and are not included in their diet.

We have two Sheppard-Towner nurses doing intensive prenatal and infant work in two different counties. In one of these two counties, one-tenth of the whole population is Finnish. Our Sheppard-Towner nurse has brought the lack of vegetables in the Finnish dietary to the attention of the agricultural agent in that county, and he has promised to start many garden clubs next year.

The Michigan Department of Health through its Bureau of Child Hygiene and Public Health Nursing is trying to bring the pre-school children of the state within the scope of preventive medicine, but much work lies outside the scope of a Health Department if the pre-school child is to be the healthy little animal he should be.

Dr. Noble: I have personal friends in this audience, who are public health nurses. I think that there is a great group of mothers that perhaps only the public health nurse can reach at the present time. In the last nine months in Pennsylvania we have examined 160,000 children. We are overworking the nurse and we can not give her any more to do; but if I had my way, there would be enough public health nurses so that every home and every mother, might learn from the nurse herself, out of her fine training and experience, the things that we all want to "get over" to the mother.

Dr. B. Franklin Royer, American Child Health Association: I was reared in the rural schools and on the farm, and I have worked in a state where we have every class of citizen. We have a group in the Pennsylvania mountains comparable to the cheap white trash of the South. There is a tremendous foreign speaking population in rural districts and in the large cities, living there because of the curious mining situation and the industrial conditions along the rivers of the

state. The rural problem in one state, you see, may be vastly different from that of another, where the foreign speaking reside largely in cities. In putting over education to these various groups we have not utilized all the agencies at our command as we might, for instance, the medical profession.

I remember once the late Dr. Samuel G. Dixon said to me, "Here is a curious request from Franklin County Medical Society. They have asked me for a paper on what kind of health talks to give in the schools. They are having a sort of outing at one of the country doctors' houses. I want you to go down and tell them what to teach." I said, "Dr. Dixon, it is rather awkward for me. I was born and brought up in that county. They call me by my Christian name down there." At any rate, I obeyed orders and went. I found the doctors had organized themselves to give a talk in every school in the county, even the country school—the little red brick, one room, school house. There was a splendid opportunity to utilize this medical group. What I said then is of little moment here, but I heard an interesting story related which I think I must tell you.

One of the oldest physicians in the county had been selected to give the talks in the high school in a manufacturing town. He told the society that he had decided he would be a little more careful there, because he was to speak in a well-organized high school. He planned, as I recall it, to give three or four talks in which he thought he would gradually develop some sort of systematic health teaching. He said when he first spoke to that group of high school boys and girls, he seemed unable to interest them in what he was trying to put over. There was evidently something wrong which he could not quite sense. He said to himself, "I will just reverse the process. I will ask these youngsters a few questions." When he asked some health questions he found they knew more than he about them. He then asked, "Where did you get this information?" They said they were using Davison's Hygiene, and they were getting over pretty good health teaching in those public schools. He warned members of the Society to be certain that they at least knew, in advance, a little more than was being taught.

The more public health work I do, the more firmly am I convinced that we must rely for the public health teaching in the future, upon the public school system itself.

I have been looking forward for some time to seeing that new manual of systematic outlines for public health teaching, which has been worked out under joint cooperation in Pennsylvania between the Department of Public Education and the Department of Public Health, a scheme which has only recently been published. It was planned by health workers and pedagogues.

I realize that the teacher has not had placed before her until recently, a text that was worth anything so far as health teaching actually is concerned. The physiology and hygiene manual which was prepared in the interest of prohibition, and which made violent attacks also on tobacco, has been the worst sort of failure.

We must *get* the normal school teachers, those who go into post-graduate courses, and thoroughly and systematically drill them in health teaching. This is apparently the only way to reach that particular generation of public school teachers. We shall have to reach the people of the present generation, those that will be through before we have developed that particular type of teacher, rural mothers, foreign mothers, mothers everywhere, and the prospective mothers, and do what may be done for them for some years by utilizing public health nurses while getting the fundamentally active teacher prepared for the job.

In the meantime, we must utilize every means we have to reach the fathers and mothers. Why not follow, after a fashion, the Wisconsin University Extension

System where they have two hundred teachers going up and down the State? Such a plan could readily give many supervisors of health teaching by carrying practical enlivening and dramatic methods to the every day teacher.

We used to have the old fashioned Friday afternoon spelling bee. Many of you were brought up in the country and will remember it. We used to line up on two sides and spell. Friday afternoon was one of the events of the week, and fathers and mothers, often with young babies, and other grown-ups, were sure to come. I think there is another opportunity to enlist interest to put over some valuable health teaching to several generations at a time.

Dr. Knox: Certainly one of the practical difficulties in satisfactorily reaching the pre-school child is in knowing where these children are located. The birth returns are too late to reach them, and, of course, they are not registered as prospective scholars in the schools. This phase of the problem can best be solved by the community itself. The people of a rural community, as a rule, know each other and can see to it that these children attend the health conferences. The Parent-Teacher Associations and other local organizations can help greatly.

This has been the case in a number of counties in Maryland, notably in one island district in Chesapeake Bay, where practically all the pre-school children were examined in one afternoon, and very satisfactory follow-up curative measures have resulted.

COMMUNITY PROGRAMS FOR CHILD HEALTH

HENRY F. VAUGHAN, D.P.H., Commissioner of Health, Detroit, Mich., Presiding

THE PART OF THE GENERAL PUBLIC IN BRINGING ABOUT A COMPLETE PROGRAM OF CHILD HEALTH SERVICES

HAVEN EMERSON, M.D., Professor, Public Health Administration, College of Physicians and Surgeons, Columbia University, New York City

Before such an audience as this, it would be superfluous to repeat the list of services comprising a complete program for child health. You came here already convinced of the necessity, and hopeful of the result of the great resources in ingenuity and funds now devoted to regaining for childhood its birthright of health.

You see your child as the product of generations, holding the hopes of the present for a happier future. You think of childhood as a period, not as an aggregation of ages, as a continuous career of vivid personalities, not as the average experience of a section of our population. The acme of individual health, not the development of strength in a statistical minority.

The program we refer to is not the composite of a series of items, specific duties and services, each adequate and appropriate to the uncompleted protection of children, old and young, but rather a philosophy, a creed, a religion of life, typified here and there in rare families. There is no more a perfect program for child health, appropriate to all communities, than there is a fixed or satisfactory treatment for all pneumonias, or one and only way of education of the mind, equally valuable for all.

A few indispensables there are, which, when they are expressed as functions to be served, seem simple, although the best brains and most loyal devotion have often failed to accomplish them when offered to the public.

The mother must have guidance through her pregnancy so that she may survive, and none other may continue the fostering, the nursing, the raising of the infant. The infant will require that watching which was first popularized by the wholesale guardianship of babies at baby stations, a mingling of brief, accurate, professional observation with a continuous and repeated teaching of the mother of the countless details of protection, method, system and adjustment upon which the little one's life depends.

From this time, until the child is free from parental protection, and beyond the age of interest of child labor laws, there is needed a continuous watchfulness over the progress of growth, an instantaneous care in the acute sicknesses, a thorough following of convalescence to complete recovery, alert searching for the defects of development, habit, and the individual susceptibilities or handicaps of inheritance, and a

teaching to the child of the laws of health, the causes of sickness and the means of avoiding them.

Is it not true that it is only because the parents, the doctor and the school teacher have failed in their services to the child that this Association was called for? We are not here on trial before a court of public opinion, but, conscious of the indispensable character of our effort, we assume leadership, and, unopposed, take for granted unanimous approval.

In the main, such confidence in ourselves and in the virtue of our cause is justified by the obvious success of the teachings and appeals of the past years, and has been encouraged by the enlistment of recruits and subscription of funds for the future. However, we are entitled to criticism and opposition, for both are essential to thoroughness and strength. They develop stamina and resourcefulness. Why have there been so few critics and opponents, and those who have developed, more among ourselves, the worker groups, than from the public whom we aim to advise and help?

The answer, it seems to me, lies at the heart of our great project, the reasons, inherent in our own ideas or plan of action.

Barring various refinements or elaborations which it can be predicted will be developed out of, or upon, the framework of the program now in operation in various parts of the country for child health, we can accept as fairly complete and adequate the duration of the services approved, we can claim honestly that with the exception of the fascinating but still rather vacant field of child psychology, the machinery or organization for applying the important facts of modern medical science has been well conceived, and where suitably staffed, now produces a high grade service, but what stares us in the face is the colossal insufficiency of our contacts, and the suspicion that we are filling gaps rather than erecting a permanent structure.

We have planned and executed reasonably well for the health care of the child from the day when the mother is first aware of the new life within her until this child has smiled, slept, crept, toddled, walked, run, played and worked up to the age of self support. We have provided by private and public means services which, here and there, are really good, for the expectant mother, the babe, the runabout, the school child and the employment certificate youth, on probation, as it were, in industry. Yes, we have done samples of good jobs, rarely, it is true, all kinds in one community, more rarely still, of a degree of consecutiveness which has given the same thoroughness of protection through more than one or two of these arbitrary periods of growth and development, for the same child.

It seems to me this will continue until we put the program into the parents' hands. In order to be practical, and keep within our means, we have, according to the fashion of the period, promoted one or another service directed to abatement of some abuse of childhood, or to save promptly the largest number of lives for the money available. We have emphasized now one, now another, period of child life as the one requiring the greatest attention. We played up the infant in arms, then jumped to the school child, and suddenly aware of the army of children marching on to school with innumerable defects, and the horde of the still unborn whose teeth would be defective in school because their mothers were using too little milk and spinach, we swung the attack until just now the parents of the United States must think the problem of health is chiefly that of pre-school and pregnancy.

Show me a thousand children throughout the length and breadth of this nation of wealth, whose lives have been watched over as we believe a child life should be guarded from infancy to self support under the care of health agencies. How many of our 20,000,000 school children have had continuous and adequate prenatal, infant and pre-school care? How many of that small band of prospective citizens, now all unconscious of the eager observance by their mothers of the newly learned rules of right living, will reach school through the perilous period of the years of independence (i. e., freedom from carefulness), under the guidance of a pre-school clinic? These will be the children of families, not of systems or of agencies.

A child reached by organized medical or social service while the mother is still awaiting its arrival, guarded through teaching of the mother during the two years of infancy, examined from time to time and watched until it reaches school, to ensure freedom from defect of growth or the result of disease, supervised and itself taught the creed of the disciples of health and then graduating fit to live and earn and create; such a child with such a record of services provided for him is about as rare today as a clinical thermometer was fifty years ago.

True, we have picked at the lives of a multitude of children, we have helped miraculously by the ubiquitous agency, at some time in the life of a great number of children, and still we have missed our mark, and to my mind will continue to travel blindly until we see that we are temporizing with our emergency stations and services, our demonstrations, and our unloadings to the hands of public officers and departments.

These are essential lighthouses in the sea of humanity, but it is still the pilots of the individual ships that bring the families and their cargoes of children to port.

If we have one burning faith among us, it is that children belong in homes of their own, with other children and the companionship of their parents. The failure of society in general is measured chiefly by inability to save the parents (their characters, their work, their lives) and so permit them to live that they can provide homes worthy of the name, where health will come as a matter of course rather than as an accidental blessing. Am I wrong in believing that it is a part of the philosophy, the tradition, the instinct, the religion of all of us that we owe the child not only shelter and food and clothing, affection, an education and training for work, but protection and guidance in health? We, individually, parents, uncles, aunts, if necessary, grandparents and guardians, collectively and separately, have a part in this complete program of child health services. Furthermore, we can never play our parts by proxy, nor shunt our desire to do the right thing by the children through the clearing house of a public agency.

Friendship, long acquaintance and respect all combine to urge me not to comment unfavorably upon the all-compromising, widely popular organization here celebrating its two-candle power birthday. Nevertheless, I shall presume upon my opportunity to urge you, good people of Detroit, and the members and guests from afar and near, to abandon the idea that organization of services for children en masse, and provision, through private and public institutions and agencies, for health teaching and supervision will carry the load which must be placed directly where it belongs, upon the family and in the household.

When we shall see offices set up by parents, staffed by doctors, nurses and others in the parents' employ, engaged in the perpetual and continuous education and protection of health, then there will be a beginning of the real, the final, the permanent, the ultimate health program for child health.

HEALTH NOT IN THE REALM OF PHILANTHROPY

If two per cent of the members of any community are sick and needing medical care at any one time, and but a small portion of these need free services because of previous dependency, or on account of the immediate incapacity which has cut off their earnings, and puts them at once and for some time to come below the level of self support, we shall always be ready to care for the sick poor and gladly win them back to strength, where possible, and to the happiness of independence in self support. But what is there in the nature of health and its preservation that throws it into the realm of philanthropy? Is it not our most precious possession, for which we grown-ups make the most fantastic of sacrifices when we see it eluding us? Do we ask the fire department

to pay the fire insurance policy on our house, our home, or the police to send a check to cover the cost of the burglary insurance we have upon our tools and stock in trade? Is the baby's carriage a proper expense for the breadwinner to meet, but the cost of the life saving advice at the health station a matter he just naturally expects the city or the church or an impersonal foundation to pay for?

Why does the mother go with the infant or runabout child to the station? She has learned from friends that she could be taught all the things the doctor never had time to talk over when he called to give the baby medicine in sickness; or, the nurse gave her no peace until she went; or, they gave a cup of tea when other mothers were there, and there were lots of neighbors to swap stories with about the other mothers, and there is always the curiosity about the weight charts; or, her doctor trusted the health station and told her to go, and if the baby was sick, they'd tell her to go back and see him again.

We have been eager to teach the ignorant, to help the helpless, to encourage the downhearted. We have set up for them services which, once they understood the value of them, should be demanded by them on their own account, and be supplied at their own cost, as they buy their shoes, bread, clothing, chewing gum and tobacco.

We are willing to tax ourselves, we, the parents, chiefly the fathers, of these children, \$1,800,000,000 a year for the tobacco we use, and, in that, include a tax to the government of almost twice the amount appropriated for all official public health services, federal, state and local.

We, who spend \$800,000,000 a year on confectionery, and include in that a federal tax exceeding the entire health appropriations of the country, also spend more on chewing gum, perfumery and cosmetics than we as tax payers vote for health purposes. It is not by increased appropriations for our public agencies alone, but through a change in the use of funds in our own family budgets that the public can play its part in completing a child health program.

Many children are reached, protected, taught, their defects corrected, and are then passed on up, into adult life, and neither they nor their families have conceived during the process that this is merely an introduction into one of the new privileges of life, the opportunity to protect our own health, and that of our children.

If the collective conscience of the parents of school children could only visualize the exhibition these doubtless doting grown-ups are making, when the records of defects of their children are printed proudly in the annual report of the health department, or read out to the Board of Education. It would seem that that city counted itself twice blest

which can show the greatest percentage of its school children whose eyes, teeth, bones, tonsils, and skin show defects due to neglect, indifference, inattention, obstinacy, or parsimony on the part of the parents, the taxpayers, the voters, for whose same children nothing is too good in time of sickness, or for clothing, housing and food.

Is it not truly amazing that we can revel in the statistical proof that the great majority of parents in this country are apparently incapable of the initiative and independence of action and courage to spend for health an amount which would be sufficient to protect the lives of their children?

Why is it natural to be mortified when we find we have neglected our roof until an equinoctial storm discloses the leak and spoils the bedroom ceiling, while we are but casually interested in the fact, called to our attention by the school doctor, that Johnny is beginning to show a leaky heart which might have been prevented if we had been quicker to get rid of Johnny's tonsils before he had that stormy attack of articular rheumatism a year ago?

Can we ever hope to develop personal and private interest in the health of the individual child in every separate home if our efforts are directed chiefly at setting up a public program for everybody's children to be carried out by bulk service and class management?

Shall we feel satisfied or give great confidence to the generous administrators of public and private funds if the end result of every demonstration is more public organization, if every town selected for the skilled study of specialists is to be left with a plan on its hands which is destined to be carried by the big, unwieldy, unreliable public, rather than through the individual relationship of parents, doctors, teachers, nurses, for the child of the family?

Can we picture to ourselves now, and urge upon our colleagues in the field, that no demonstration is complete, and no termination of the experimental or endowment period successful, unless we have left the spirit of personal participation in health in the heart and soul of every parent in the town, even if we must leave for the service of the few the shell and token of good work in the shape of the public agency?

Health is a home, household and family problem except for a few of the situations handled necessarily by the health officer for the community as a whole (water, milk, communicable diseases, etc.), and until the parents of children see the vision of it, determine to get it for their children by their own efforts, and through skill obtained at their own expense, no ideal or theoretically complete program of child health services will meet the situation.

The parent is the part of the general public which will complete

the health program for children. Begin now, with the characteristic ingenuity and resourcefulness of your officers, to start co-operative self supporting services for children, managed and paid for by their parents, the aim of which will be so to advise and serve both parent and child that no public agent, inspector, school nurse, teacher or investigator can find any preventable defect among these children, or discover in their way of living, lack of understanding or failure to practice the rules of healthy living according to their ages.

The most mischievous, because the most plausible, slogan of the powers of evil among an antisocial group in California was "The school is public, not the child." The sting in that challenge consisted in the obvious fact that, in glorifying public, democratic social endeavor, we have bred an irresponsibility and shiftlessness among parents that does little credit to our ethics of the family bond of service to children.

In the past twenty years we have done much to break down the sense and practice of family responsibility for the child.

For the indigent, the improvident, the casual, for the parentless child, for the protection of our public investment in education, public services will be required, and they must be provided with generosity, with science and with human devotion to each child, but the measure of our greatness, rather than of our bigness, will be the smallness of numbers receiving public care in childhood, the lowness of percentages of children at school with defects, the rarity of expectant mothers who are not provided by their husbands with such medical and nursing guidance as physicians now know these women all require.

Please do not misunderstand my protest. I am not asking you to relax in your efforts to have imagination and information of life processes incorporated in the school teaching of children. Nor do I believe we can disregard the facts of experience, and discontinue our efforts to have good health services available at schools, and for the children before they reach school. And I would not have you indifferent to the expectant mother and the babe in families which cannot afford, or do not see the need of, medical and nursing supervision.

Just as you individually would feel you had failed in a most elementary duty to your children if a preventable defect or interference with their health occurred because you had not availed yourself of the doctor and visiting nurse, we must make it a part of our program to create a sensitiveness to health neglect comparable to that which is universally felt if a sick child is left untended.

As I sat last month facing a group of several hundred mothers in New York who were taking upon themselves the work of organizing a self supporting program of child health protection and general visiting

nursing, it seemed to me I saw the right spirit and the right solution. Here was to be the office, their meeting place, where they, the parents, provided for their children; here the nurse, teacher, observer, servant of the sick and well, here the physician, trained to see the least deviation from the right development of body and mind of children.

Specifically, I wish to suggest that in every community where the emissaries of this Association go to initiate or develop further or better services for children, they lay at least as much emphasis upon the personal participation of parents in providing for their children's health as upon the necessity of baby stations, prenatal clinics, dietitians, school nurses and teachers of health, supported by private or public funds.

And furthermore, I hope a multitude of opportunities may arise for you to set up a plan, show the costs and assist in starting self-supporting services at private expense, which will be so reasonable in cost and so continuous and thorough in the character of their services that the endowed and public agencies will be rendered largely unnecessary.

Does it occur to you that one of the reasons why there has been such great success from the past twenty-five years of education in the causes and means of preventing tuberculosis is that every argument led directly back to an individual participation in prevention, personal self-protection, periodic examination to detect early signs of disease, and a sense of confidence and hope built upon the knowledge of competent professional direction?

The part of the public in completing a program for child health will, in my opinion, be co-operation at private expense rather than expansion of public agencies, except those which are a necessary part of the education of the school child in health.

DISCUSSION

Dr. Richard Smith, Boston, Mass.: It seems to me that there is very little to be added to what Dr. Emerson has already said, but it might be well to emphasize one or two points by reiteration. He spoke about the necessity for continuous supervision. We have been able to give supervision for a short period of time, but we should try more and more to see that children who come under medical supervision in infancy or early childhood should continue under it until they reach maturity.

Another point brought out by Dr. Emerson is that any such program as he has outlined demands that the medical profession be ready to meet the responsibility which will be placed upon it. If the private physician is to do any considerable amount of health supervision, he must be prepared to give the type which we know is necessary. It is not sufficient for him to be interested in the child who presents evidence of disease, but he must become familiar with the development of the normal child and be able to give advice that will be of help to the parents in securing

and maintaining its health. I am very glad also to have the note sounded, that we must put the responsibility for the health of the children on the parents. The ultimate success or failure of our work depends upon whether or not we make parents accept that responsibility. We can not go on indefinitely taking it away from them and placing it upon others.

Professor C. M. Elliott, Detroit, Mich.: It seems to me that the most important note in Dr. Emerson's paper is the need of having the rank and file interested in health. It seems rather strange to me to see a gathering of this sort composed almost entirely of people who are interested in the specific problem under discussion, with so little opportunity for the parents of the children in whom we are all interested, to come into the meeting and get the benefit of a discussion of this sort. Why should we not have the largest auditorium in the City of Detroit for this meeting and then make it as difficult as possible for the parents to stay away? It might help in the whole program for getting the parents interested in the health of their children.

Mrs. E. R. Weeks, Kansas City: Perhaps you recall that I said you should use your Parent-Teacher Associations more. Now that bears exactly on what Dr. Emerson said. The National Congress of Mothers and Parent-Teacher Associations was organized because people felt that the home was turning over to the school duties which belonged in the home, and should be brought back to the home. This health program can be carried out if you use these organizations which were created exactly for the purpose of taking the responsibility for the child away from outside agencies and bringing it back to the home. That is the thing we are doing in Kansas City today.

Dr. Vaughan: I might cite an interesting experience we had in our public schools in Detroit last year. We, as other city health departments, tried to do something in the nutrition field. As a health department, we thought it was our duty to educate, but we were not to go beyond the bounds of education and become paternalistic. At first the health department paid about 40 per cent of the cost of the lunches, but last year we had so far convinced the parents of their own responsibility that we had to pay for less than 5 per cent; in other words, the parents pay for 95 per cent of the work. It seems to me that this is an important principle which should be applied to every phase of health education. It is our job to make the parents feel their responsibility and, as far as possible, turn the problem over to them. The health officer's duty is to endeavor to work himself out of a job. After educating the parents, there should be very little left for us to do.

THE PRE-SCHOOL CHILD AS A HEALTH PROBLEM

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PRE-SCHOOL HYGIENE A NEW MOVEMENT

The pre-school child is being rediscovered. A few years ago the pre-school period of childhood was picturesquely called the "No-Man's Land" in the field of public endeavor. It was pointed out that there were social provisions to protect the new born infant and compulsory safeguards for boys and girls of school age; but that the toddler and runabout did not have our official concern. In the social sense of the term, the pre-school years of childhood, particularly the years from two to six, were suffering from neglect.

But all this is changing now. The "No-Man's Land" is beginning to look like a frontier settlement. Outposts have been established. Surveyors are on the ground. Streets are being laid out. You can get some very good maps from the Land Office. There is every indication that the health and development of pre-school children are coming under systematic social control. This new movement in public hygiene, under the stimulus of the World War, is at present remarkably active, but it is not a boom. It appears to be a sound movement based upon principles of prevention and upon common sense foresight.

HEALTH SIGNIFICANCE OF THE PRE-SCHOOL YEARS

How can we afford to neglect the pre-school years of life? The child is father of the man; but the pre-school child is father of the school child, of the youth, and of the man. The pre-school years are the most important in the development of an individual for the sufficient reason that they come first. We commonly say the children outgrow their childishness. But this is a false view. Children do not grow out of things; they grow into them. And they grow into more of their kingdom during the pre-school years than during any subsequent period of their lives. From a medical and from a psychological standpoint, we may safely say that the basic lines of both physical and mental organization are laid down during the formative pre-school years.

How could it be otherwise? When a shipbuilder builds a ship, he lays down the timber first, the trimming and rigging come second—often after the launching. What counts first, last, and most in the

ship are her planking, her beam, her keel. How she will mind the rudder, how she will take the waves, and how she will weather the sea, are fundamentally influenced by what happened while she was on the stocks. In a more profound way still, the pre-school years are fundamental to all the development that follows. This is when the individual is on the stocks.

THE MEDICAL SIGNIFICANCE OF THE PRE-SCHOOL YEARS

The health significance of the pre-school years can be quickly summed up. First of all, it is the period when death and disease pile up their biggest scores. One third of all the deaths of the nation occur below the age of six. There are ten times as many deaths during the half decade of pre-school life as during the following full decade of school life. Even physical accidents like being scalded, burned, injured, and run over by automobiles, bear with special weight on the pre-school age. Susceptibility to infection is generally greater the younger the child. Over 80 per cent of all cases of diphtheria and of all deaths from diphtheria occur before the age of five. Malnutrition, likewise, is more prevalent among pre-school than among school children. Rickets, a disorder of nutrition, is almost as common as dental caries, and is essentially a pre-school disease. Approximately 15 per cent of three thousand pre-school children examined in Gary, Indiana, clinically, showed bony defects of rachitic origin. With few exceptions, the physical defects of school children, most notably malnutrition, nose and throat conditions, are even more prevalent among pre-school children.

It is not our purpose to convey the impression that it is a great misfortune to be a pre-school child. But we are trying to show that it is of all periods the most fundamental for a constructive health program. Health work here pays the highest dividends. The forces of prevention and of guidance must be gradually shifted downwards to the nursery level.

PREVENTION OF MALNUTRITION, DIPHTHERIA, AND RICKETS

Malnutrition, diphtheria, and rickets constitute three of the most powerful foes of early childhood. Nutrition work, it is now recognized, should not be limited to infant welfare stations and to public school classes. There should be a continuous sequence of supervision which will reduce malnutrition to a minimum by the time of school entrance. It is most probable that diphtheria, like smallpox, can be conquered by a prevention procedure including the Schick Test and toxin-antitoxin

treatment. New York City is making a convincing demonstration of this possibility by focusing the work on the pre-school child. Rickets, likewise, can doubtless be largely eradicated through fish oils and sunshine in any community which undertakes the task and sees it through, beginning with the baby's birth. The Federal Children's Bureau, with the co-operation of the Yale Medical School and local agencies, is inaugurating a community demonstration in a section of New Haven to prove that rickets can be thus controlled.

PSYCHOLOGICAL IMPORTANCE OF PRE-SCHOOL AGE

What is true of general physical development, is true of mental (and nervous) development. The brain grows at a tremendous rate during the pre-school age, reaching almost mature bulk by the age of six. The mind develops with corresponding velocity. The infant learns to see, hear, handle, walk, comprehend, and talk. He acquires an unaccountable number of habits fundamental to the complex art of living. Never again will his mind, his character, his spirit, advance as rapidly as in this formative pre-school period of growth. Never again shall we have an equal chance to lay the foundations of mental health. From the standpoint of mental hygiene, the pre-school period, therefore, appears to have no less significance than it has for physical vigor and survival.

Normal mental growth is not a matter of complete predestination, even in infants. Disease, handicaps, distortions, many of them preventable, occur. Practically every case of mental deficiency develops and is recognizable during the pre-school years. Three-fourths of all the deaf, a considerable proportion of all the blind, one-third of all the crippled, and over three-fourths of all the speech defectives come to their handicap during the pre-school period. Numerous cases of mental abnormality, of perversion, of faulty habit formation and of conduct disorder have their roots in the pre-school years. Our kindergartens and nurseries must reckon with many problem children manifesting serious errors or defects in behaviour development. One-fourth of all our school beginners fail of promotion at the end of the first year in public school. Retardation, abnormal prematuration, normal precocity, superiority and normality all tend to reveal themselves well before the child cuts his sixth year molar.

SOCIAL CONTROL OF PRE-SCHOOL CHILD WELFARE

For all of these reasons we shall be compelled to bring the pre-school years of childhood increasingly under social control. The ultimate

protection of national stamina requires nothing less. How can this social control be accomplished? It has been hinted in some quarters that we might congregate all of our babies and toddlers in capacious state nurseries as we now compel all of our boys and girls to go to capacious schools. This would be a very convenient arrangement for calling the infant roll, for weighing and measuring, for regulation of diet, for the dispensation of cod-liver oil and sunshine, for diagnosis, for immunization, and even for instructing and training. It would be a decisive solution of the whole problem, but unfortunately the solution would be worse than the problem.

After all, we do not need to adopt any violently revolutionary measures in order to bring school hygiene under reasonable social control. The fundamental enabling statutes are already on the books of social legislation. Still more important, the enabling traditions have long been established, and the three groups of agents primarily responsible for child hygiene, namely, physician, teacher, and parent, are still ready to perform and share their duties.

The problem of organizing and administering an adequate system of pre-school hygiene consists chiefly in bringing these three groups into wider and closer contacts. Instead of inventing radically new devices, we need only to utilize and adapt agencies which have demonstrated their value.

I shall try to indicate very briefly the natural lines of evolution under three headings: 1. Periodical health service. 2. Kindergarten and nursery. 3. Parents.

1. PERIODICAL HEALTH SERVICE

Just thirty years ago Dr. Budin, a French physician, established the first recorded infant welfare station which became the forerunner of the child consultation center, the children's health center, the baby welfare conference, and all similar enterprises except, however, the Baby Show which naturally was invented by P. T. Barnum in the heyday of his Great, Incomparable American Museum, at New York.

The child consultation center is a simple device. Its essentials are a doctor, a nurse, a parent, and a child. Physician and mother hold council concerning the health and rearing of the child. Fifty babies and as many mothers may come in one afternoon to the consultation room but each situation is individual. The schools may handle children in masses, but the doctor makes one examination at a time, and directs his recommendations to one particular child. He supplements the

knowledge and solicitude of the mother and, for a critical moment, the welfare of the child may be in his hands. If this oversight is repeated weekly and then monthly, and still later, at semi-annual intervals, we have the realization of continuous pre-school supervision. The whole drift of child hygiene is toward the development of such a chain of safety which will lead the infant securely from the crib to the school desk. Each successive examination and follow-up forges a link in the chain.

This periodical health service may be supplied either by a community agency, by the family doctor, or by a practicing pediatrician. We have not taken into sufficient account the possibilities of developing such a supervisory health service through the private practitioner. This service is desirable for mothers of every station. The mother needs the stimulus which comes by applying norms and standards to measure the health and normality of her child. We can not depend upon instinct alone to keep the maternal impulse alive and alert. We need a periodic supervision to give it direction and vitality. Malnutrition and physical defects have hitherto been the chief concern in this periodical health service. They ought to be of fundamental concern, but the time is rapidly approaching when we must broaden our present medical supervision to include the child's mental health and psychological development.

2. KINDERGARTEN AND NURSERY

The American kindergarten is nearing its seventieth birthday. Whether it is to survive longer than the allotted threescore and ten years is a question which may be raised in this connection. The friends of the kindergarten, among whom I wish to be counted, believe that it has a prospect of much greater longevity. The kindergarten of today, in this country, reaches only one child out of ten, from four to six years of age. It has, however, wielded a powerful influence upon American education.

The position of the kindergarten is a very strategic one. It occupies the borders of the pre-school domain and, because of its organic relations with the public school system, it can perform a great service in the development of pre-school hygiene. In order to meet this vital opportunity, it must redirect its energies and, to some extent, readjust its present organization. The kindergarten of the future, if it is to serve adequately the demands which are forming, must not function as a sub-primary school room, but must transform itself into a flexible, versatile health-promoting agency. It must take on the semblance of a

health dispensary and must conduct its activities in close alignment with infant welfare and public health agencies. Indeed it must be converted into a child hygiene agency which will have a new concern for physical soundness and mental health. To realize this destiny, it must come more fully under medical and nursing influence.

In view of these possibilities, the new nursery school movement, both in England and in America, takes on considerable significance. The nursery school as a public hygiene agency has received the official sanction of Parliament through the Education Act of 1918. In our own country, it is altogether on a voluntary and pioneer basis. One of the most notable of all nursery schools is the Merrill-Palmer School of Detroit, which was established in 1921, and reflects the vision of its donor. This nursery is demonstrating the possibility of adapting medical and educational procedures more systematically to promote the development of children from two to six years of age and also to train the present and future parents of such children.

It is too early to assess the work and the significance of the nursery school and, at present, we may regard it sympathetically as a kind of third party movement through which the full responsibilities and opportunities of the American kindergarten will be made more clear. We do not so much need the nursery school as an additional and separate agency, but we may need it as a stimulus which will bring the kindergarten to a prompter realization of its functions in a program of pre-school hygiene.

3. PARENTS

Finally, the welfare of the pre-school child will be intimately dependent upon the character of his home and upon the intelligence of his parents. The administrative task of pre-school hygiene resolves itself largely into problems of parental guidance and pre-parental education.

From the broad standpoint of public policy, no more far-reaching measure in behalf of the children of the future can be instituted than a systematic and sincere type of pre-parental education. This education must be so conceived and so administered that it will reach the little mothers in the grammar grades and girls in high school, normal school, and college. It must reach also the boys.

By developing the possibilities of a periodical health service and by bringing it through the kindergarten, into living relations with our vast public school system, we shall be able to meet more completely the needs of the pre-school children of the future and of their parents.

DISCUSSION

Mr. Philip S. Platt, New Haven, Conn.: I note that Dr. Gesell has used the term "pre-school child" and "pre-school age" in a more inclusive sense than I have been accustomed to use it. He includes the first two years of life as a part of the pre-school period, which literally speaking it, of course, is. But there have been many articles which discuss the pre-school child as of from two to six years of age. Which is the better practice to follow? I wish Dr. Gesell would explain to us his use of the term.

Dr. Gesell: Specifically the term pre-school age is made to include the period from two to six years. I believe, however, that it is desirable in proper context to use the term elastically to cover the whole developmental period from early infancy onward. There are good reasons for giving distinctive recognition to the neonatal month, but thereafter, it is well to emphasize the essential continuity of child health supervision. In this supervision I would stress the term developmental because it includes the mental as well as the physical aspects of health.

Dr. Emerson: I agree that we cannot promote continuous health service through the private relation of patient and physician until physicians are trained and prepared to give it. My belief is however that usually in American communities and in professional work, the demand for service precedes the supply. The physician will not go about in the market place and offer a new type of professional advice, but as soon as parents wake up to the fact that they want the doctor to take care of the healthy child, the service will be forthcoming. Just as soon as parents learn what we have to teach them, and assume their responsibility for maintaining the health of their own, and go to the doctors and ask for service for this purpose, they will find physicians ready for the work. Physicians have been trained to take care of the sick. The family doctor is just as much interested in the prevention of disease as is the health commissioner. Make it clear to the parents that theirs is the responsibility for their children's health and they will make most health agencies unnecessary.

THE NATIONAL CHILD WELFARE ORGANIZATION OF BELGIUM

MONSIEUR J. MAQUET, Directeur General de l'Oeuvre Nationale de l'Enfance,
Belgium

Before the war the charitable work of helping delicate children was confided at the same time to public bodies and to private charitable organizations.

The nature of the work was rather curative than preventive, and was, in consequence, in great measure insufficient, considering the matter from the double point of view of racial improvement and social progress.

In the years immediately preceding the war, however, this benevolent work assumed a more preventive form, as is evidenced by the fact that, before 1914, 70 infant welfare centers, whose action extended to 62 different townships, were founded.

It must, however, be added that the number of children deriving benefit from this philanthropic work was very restricted. For all Belgium, there were only two Maternal Canteens in existence, one in Brussels and the other at Antwerp.

The public bodies of a few townships and a small number of charitable societies had begun the practice of providing meals for school children.

A few organizations, such as the Brussels Fresh Air Society, busied themselves with the work of sending a very limited number of children into the country and housing them in suitable establishments; and even a few public bodies managed to do likewise for their school children.

During the German occupation it became a matter of the greatest urgency to ward off the evil consequences of the war, as much as possible, by ensuring the alimentation of the inhabitants and especially of the children.

It was for this reason that the National Relief Committee was founded at this trying time, and in January, 1915, a section for affording Aid and Protection to Children's Charitable Societies was added. The result was that in a short time the country was covered with a network of these organizations.

The nation's effort in the direction of child welfare having proved such a remarkable success during the enemy occupation, the question naturally presented itself, after the armistice, as to whether this useful work should be continued or otherwise, and the Belgian parliament only responded to the unanimous wish of the people by voting the Act of September 5th, 1919, for the establishment of a National Child Welfare Organization.

The National Child Welfare Organization has for its object the encouragement and development of child welfare by favoring the diffusion and the application of hygienic rules and methods based on scientific principles in families and educational establishments both public and private, the encouragement and upkeep, by the allocation of grants or otherwise, of all work connected with the welfare of children, and the exercising of an administrative and medical control over all such recognized organizations.

The National Organization has a legal status. It is an autonomous public body, formed under government control, but also under a special statute which, notwithstanding this control, ensures its complete independence.

The work is managed and administered by a Superior Council composed of 40 members appointed by the king.

The purpose of this Council is:

1. To take such measures as it may deem necessary in all that concerns child welfare.
2. To advise on all questions submitted to it by the government bearing on child welfare and protection.

ACTIVITIES

The National Organization takes charge of the following work:

I. Infant Welfare Centers, which have been formed in every township of the country and whose mission it is to place under medical surveillance infants under three years of age.

These centers have been the means of saving thousands of young lives and have contributed in a remarkable degree to the reduction of the rate of infant mortality.

II. The "Drop of Milk." This work is carried out in conjunction with the preceding, its object being to supply the infants of the poorer classes with milk and other necessary baby foods.

When the managers of the work deem that, for special reasons, the formation of the "Drop of Milk" section is not desirable, they are empowered to replace it by encouragement doles.

III. Creches and Toy Stores. Although they do not figure among the activities in favour of which the Act of Parliament provides for the intervention of the National Organization, creches and toy stores profit from the subsidies granted to infant welfare centers and the "Drop of Milk" work. Indeed, there is always an infant welfare center as well as a "Drop of Milk" organization, attached to every creche or toy store.

The National Organization also interests itself in all work for harboring nursing children and their mothers, mothers deserted by their husbands, and unmarried mothers ("Mothers and their little Ones" at Liege, "Our Shelter" at Uccle and the "Mother's House" at Antwerp).

IV. Maternal Canteens. These canteens are intended to supply women approaching their confinement, and mothers with children at the breast, with an additional meal.

V. Meals for School Children. This work is specially organized in the big towns and industrial centers and affords supplementary alimentation to school children, the more delicate of whom are entitled to attend the Canteen for Delicate Children where they may obtain a substantial dinner.

VI. Holiday Homes. These homes are established at the seaside or in the country, and children threatened with consumption, or otherwise in very delicate health, are received there and looked after with loving care, while they derive enormous benefits from the fresh air cure and extra feeding.

They are placed in healthy and sanitary surroundings and are educated in schools where the teaching is in accordance with the Government program.

The National Organization for the Welfare of Children carries on many other branches of work such as the surveillance of children given out to nurse or to be taken care of by outsiders, daily fresh air cures for children, the re-education of abnormal and backward children who are treated in a special institute (The Medico-Pedagogical Institute at Rixensart), etc.

The expenses incurred in carrying on the work of feeding very young children, which is subsidized by the National Organization, is apportioned as follows: one-half by the Government, one-quarter by the province and one-quarter by the township, as stipulated by the Act.

The cost of the homes for Delicate Children is entirely defrayed by the National Organization.

In order to obtain the benefits accruing from these different activities, the families interested are called upon to pay a small sum, exception being made in the case of infant welfare centers, meals for school children and holiday homes for delicate children.

There is a further rule to the effect that the income of families, the members of which intend profiting from the work, must not be above a stated sum.

Table showing number of activities and children deriving benefit therefrom on the 1st of January, 1923.

	<i>Number</i>	<i>Beneficiaries</i>
Infant Welfare Centers	898	63,227
Drop of Milk	685	25,780
Maternal Canteens	509	15,581
Delicate Children	42	10,582
Meals for School Children	19	18,823
Homes for Delicate Children: In 1922, 7,241 children profited from a gratuitous sojourn of 3 months in Homes.		

**ADMINISTRATIVE PROBLEMS ARISING IN THE FIELD OF
CHILD HEALTH NURSING**

Round Table

**SOPHIE NELSON, Director of Nursing, Boston Health League, Boston, Mass.,
Presiding**

ADMINISTRATIVE PROBLEMS ARISING IN THE FIELD OF CHILD HEALTH NURSING

DISCUSSION

Miss Nelson: I am not presuming to discuss all the problems arising in the field of child health nursing. I am only presenting a few of them with a view to starting a discussion and, I hope, a solution, of some of the difficulties that arise on the administration side.

The first difficulty that comes to my mind is the ever present one of making arrangements for physical examinations for children, and of finding enough clinics for the diagnosis and correction of the numerous defects that are found. Getting medical personnel has always been a problem which closely touches the nursing field because we are so dependent upon it. It is not becoming any simpler, but rather, perhaps, more difficult, inasmuch as we are making so many more demands than we used to. For instance, we not only want physicians for our physical examination clinics and our baby conferences, but we now want them for nutrition clinics, for posture clinics, for mental hygiene clinics, etc., and the staffing of these clinics is a very real problem. Especially in smaller places do we find much difficulty, and the administrator in nursing is hard put to it to advise how to get the proper corrections and counsel for the many activities that we have stimulated.

In connection with the medical end of child health work, we also are facing the difficulty of getting cooperation from the family physician. He usually is not particularly interested and, although we advise people to get help constantly from their family physician, as we should, they often come back feeling that help has not been forthcoming. What can we do to stimulate interest in the practising physicians since we need them so badly as an adjunct to our nursing? I would like to have some discussion apropos of this about whom we should refer to family physicians and where we should draw a line about clinic attendance.

It has been admitted that the public health nurse is one of the big factors today in health work, and, of her many important tasks, the most important is home visiting—the instruction given in the homes. It is very easy to talk about following up every baby born, the necessity of proper follow-up work in order to have every defect corrected, and the importance of consistent and persistent educational instruction in the home, but the question naturally arises, How is this to be accomplished? There is no need of discussion about the results obtained when good follow-up work is done. We have all more or less decided that it is the contact in the home which is the pivotal point in health work. Follow up work in all branches of child health nursing must be carefully done, and wise instruction given, or it is worse than useless. This means personnel, many of them, and the right kind. Therefore one of the first problems that nursing organizations are facing is getting personnel. By that, I mean getting properly trained nurses who have a good background and the right personal and professional qualities for this kind of work. With the many new things that arise in the field of child health nursing, comes the problem of keeping the personnel up to date, which means that instruction must constantly be arranged for them. In perhaps no other branch of public health

nursing is it so essential that the nurses know the details of the problems and specifically know a good deal about physiology and nutrition, especially in relation to babies and little children. They must also know something of the specialties, such as tuberculosis, and mental or venereal disease because they are faced with the necessity of giving instruction in the prevention of all diseases. More than in any other group, the child welfare nurse is often faced with an emergency where she is called upon to give advice on the spot about what to do or what not to do with a baby or child. Wrong advice makes such a vital difference. It is one of the biggest responsibilities of a nursing organization doing child health work to get sufficient, well instructed personnel, especially for the infant age group.

All this means money, and so the financial difficulty is ever present. It is a tremendous problem to decide, with a limited budget, which are the most important of the many things that are necessary in child welfare work.

In relation to the cost of service, comes the question of using volunteers or paid aids in some of our child welfare work. In view of the limited budgets with which most organizations work, it is a problem to augment the nursing personnel with other personnel and still ensure that the work is well done.

One difficulty is the fact that child welfare work is done by so many and such various groups. The child does not constitute a specialty like tuberculosis or venereal disease. Child welfare is not selective except in its age group, and so agencies dealing with all branches of health work are interested, and interested primarily in the child; and it brings numerous agencies into the field and more specifically into a given home. So the problem arises as to how we can best cooperate, coordinate, and amalgamate (those much over-used words) for the welfare of the child because we are in great danger of so overburdening the family with visitors and various advices that we confuse rather than assist them.

From the point of view of nursing, one of the burning questions of the day is specialization versus generalization. Theoretically, most of us believe in generalization, at least we all agree that it is advisable to have one nurse do as many services in a home as possible; but those of us who have made child welfare a problem and have concentrated upon it are very fearful that, in the stress of emergencies, especially in visiting nursing associations doing child welfare work, the child welfare work will suffer tremendously. The big problem is, How can we best safeguard the welfare work and see that it is being properly and adequately done in relation to a general service.

We hear a good deal these days about records and statistics. This is an important problem in relation to child welfare work. Too little thought is being given to the whys and wherefores of figures and records and very often they are used only as a bookkeeping account and are not available or helpful in the study of the problem. Many arrangements are made for better statistics and better records, and it is difficult to know what is necessary and what is superfluous and to get the correct balance between what is desirable and what is practicable. Nurses are notoriously bad record keepers, and one big problem that administrators have to face is how to get nurses to keep records well, and to arrange for the time to do this with the stress of the field work which is, after all, the most important. Records are something to which we should give more attention as we are constantly discovering that the same figures do not mean the same thing to two people. We are being misunderstood and misquoted ourselves and are doing the same to others because of our lack of standards.

Last, but by no means the least, of the difficulties of administration is the administrator herself. Too often do we find administrators who know very little about the problem they are trying to solve and whose minds are so occupied with the technicalities of nursing that not much attention is being paid to the bigger end—the health of every child. Too often do we concentrate so much upon activity that we administer that we fail entirely to think about the child for whom the whole activity is meant. We talk a good deal about other people and the lack of cooperation, and how easy it would be to do things if other people were only like ourselves, when very often our idea of cooperation is that everyone shall do as we think. We feel very much that “Everybody is out of step but Johnnie.” One of the biggest problems is the dearth of good administrators who know what they are about or the objective that they are trying to reach, and who have those qualifications which make them good leaders and good administrators since they must truly be all things to all men, have the wisdom of Solomon, and the qualities of angels.

Miss Elizabeth Fox, Director of Nursing, American Red Cross: The first problem Miss Nelson presented, that of bringing about a better feeling and better working relations between public health nurses and doctors, is one in which I am keenly interested because it is one that all of us are confronted with more or less. I cannot discuss how to do it in the city, because I am too far removed from city experience to have a worth while opinion; but concerning rural problems, I have two or three suggestions to make.

In the first place, I think Dr. Brown touched one of the outstanding reasons why we have difficulty in the country with our doctors, and that is that the nurse too often works out a plan for an undertaking requiring medical service without asking the doctors to help in the planning. It may be a baby clinic, a school nursing program, a tuberculosis campaign. The nurse too frequently does not consult the doctors until everything is ready to begin and then goes to them to tell them what their part is and to ask them to do a good share of the work. I think Dr. Brown is perfectly right. Doctors are not nearly so interested in falling in step with a plan which they have not had any part in working out, especially when they must take just as much responsibility and do as much work as the nurse herself. I am sure that if the nurse consulted them first about the undertaking and got them to help lay out the plan, they would be much more likely to want to take a hand in it and to help promote and put it through.

Another mistake I think we sometimes make is in regard to securing medical representation on our committees or boards. Miss Nelson raised this question in regard to the representation of medical men in our work. How many times, I wonder, have we picked out the best medical man in the county and put him on the local board or committee, and then wondered why the rest of the medical men were not particularly interested in our work? It seems to me perfectly natural that where there is one man who stands out above all the rest, other men are more or less jealous of him. We pick him out and put him on our committee, but by so doing, we run the risk of alienating the other medical men. I have often suggested to our Red Cross chapter officials that instead of picking the most advanced man, the man that is most likely to understand and help us with our program, we should go to the county medical society and ask it to nominate a man to put on our committee. We may not get the one we want; probably we won't at first, but we will get the whole county medical society supporting their chosen representative on our committee.

We make the same mistake I think in seeking medical service for clinics and other similar undertakings. Instead of going to the county medical society and asking it to select its own man, or to work out its own plan for manning the clinics, we nurses pick out the doctor who we think is the best one in the county for the purpose, and ask him if he won't supply medical service for our clinic. Being interested and progressive, he probably says, yes, he will. Thereupon, the other medical men in the county are disaffected.

I think perhaps if we approach these things from the point of view of the medical men as a whole instead of from the angle of what seems to us immediately best for our work, we shall get the whole medical group behind us instead of just the most progressive men.

Miss Nelson: I think Miss Fox's point was particularly well taken, but I still think we have the problem of making an adjustment of the tremendous demand on the medical men. We go on asking doctors to give their time to do this and that, and in only a very few instances are they being paid for their services. The time is coming when we simply can't go on demanding. Some solution must be found for that problem.

Miss Margaret Stack, Chief, Division of Public Health Nursing, State Department of Health, Hartford, Conn.: In any child health organization we talk about getting over positive health. It seems to me it is time we started to talk about the positive cooperation we secure from physicians. A certain doctor who is a state health officer thought he would find out about the much discussed lack of cooperation on the part of the physicians with health officers and nurses. He said that he honestly tried to sift something down and the instances he found were so few and far between that he recommended forgetting it and trying to cooperate more. Talking of lack of cooperation gets us nowhere.

Dr. Frances Sage Bradley, Little Rock, Arkansas: Not being a nurse I am not sure that I am entitled to a word, but I should like to say that in some of our states we are meeting this difficulty by working in counties only upon the invitation of the local medical society. This assures us not only of their approval, but of their cooperation, which is an important item in sections where health officers and nurses are rare. In many cases we are dependent upon local doctors for follow-up work.

This point ~~was~~ discussed at the recent conference in Washington and it was found that several states were providing for payment for such services. In some instances this is done by the Bureau of Child Hygiene; in others by the county; and again by certain organizations within the county. It is interesting to see the time coming when the practical value of public health work will be recognized and its exponents placed upon a more dignified basis. Communities should no longer expect volunteer service from their physicians any more than from their nurses or other workers.

A Member: I think that at the present time the nursing work is perhaps a city, more than a rural, problem. I can think of half a dozen cities where the child welfare is separate from the general nursing service. Where the administrators of those nurses are not working together as they might be, we are duplicating effort. Whether it is practical to have one administrator, as is being tried out in several cities, or whether it is possible to have some common board where the members of the organization can sit together and work out their problems, I think we

must make a decision pretty soon, for we are incurring criticism as nursing administrators. We are not always willing to see the job as bigger than our own particular interests, and also to see the interest of the children themselves. I think every one of us knows of many instances where we are not getting together and where there is a great deal of duplication, because perhaps boards are handing on their traditions and their own ways of doing things when we might be big enough to try to get together under one administrator, or to have some common council.

Miss Marie T. Lockwood, Wilmington, Del.: We had just such a suggestion as many of you have spoken of in regard to the nurses themselves. The fact that the administrators have not been any too friendly with each other has caused a great deal of friction and I think we can go right back to our administrative selves in many instances. The workers of one organization criticize the work of another organization; we ourselves are to blame a good deal for the friction which has existed. Fortunately, or unfortunately—I do not know which it will turn out to be—we in Delaware are in the stage of reorganizing our State Health. Under the last legislature, the State Board of Health, the Child Welfare and the Tuberculosis Commissions were merged into one commission. That will bring together several warring groups under one administration. We find in a small state (it may not be so in a larger state) that these bickerings within departments have become state wide. The people who support these organizations are pretty well fed up on disagreements and misunderstandings. If we want to exist, and have the public health work go on, we health people will have to get together. We have, I think, partially solved our problem.

Now, to speak of "generalization versus specialization," that has to be worked out. We have not tried it. One must give up some things if one is going to accomplish other things. You cannot have specialists all along the line, but I do see that there are many drawbacks which this "generalization" may possibly do away with, such as inner friction and misunderstanding on the part of the public. The public puts up the money for these things, so when two or three nurses come into a district, and two or three automobiles come in too, everybody knows that Miss So and So has passed their way and maybe she has visited in the same house where another worker has just been calling. We are now going to have one nurse in a district, and she is going to attend to the several health aspects of that entire district. Probably something will suffer; maybe child welfare work will not be done just as well as it once was done, but something must be given up for the best interests of the whole. I believe there are possibilities in it. I shall report at the next meeting how the work is getting along. At least it will solve the misunderstanding between administrators and it will do away with the jealousies that crop out among uncoordinated workers. You may not realize it, but you do hand down to your workers some of that "feeling" that you may have towards Miss So and So and her workers. I think there are many problems yet to be solved. The solution will be reached by patience, fairness and a willingness to understand.

Miss Nelson: Miss Lockwood, in relation to cooperation in the state, didn't you say that the nurses had been put under one nursing head?

Miss Lockwood: Yes.

Miss Nelson: Does that mean that you do not have a bureau of child welfare, tuberculosis, etc.?

Miss Lockwood: Yes, we have done away with that.

Miss Nelson: I think we might have some very free discussion about generalization versus specialization. What people interested in child welfare work think is vital to keep hold of in a generalized system. We all realize that in a generalized system, some things must be allowed to go, but what are the things that must not be given up? You say some of the tuberculosis cases must be reported. They must be given instruction, they must be placed in their proper sanitariums. The question comes up, what are the vital things in child welfare, which we feel must not be given up? How are these vital things to be protected and carried on as efficiently as before? I wish we might have discussion about that from the point of view of someone who has tried it.

Miss Mary Laird, Director, Public Health Nursing Association, Rochester, N. Y.: We have had a generalized service from the beginning for five years. We took over tuberculosis nurses, the nurses from dispensaries who are doing follow up work for children's clinics, particularly, and it was quite a mix-up for us. We did not know just how to start. We had to give them some training in general public health nursing; so we were obliged to have a teaching district. We let a lot of work slide while we were doing it, and I do not know whether we have it all back again, but I know that our work is increasing so that, starting in 1919 with eight nurses, we now have twenty-seven who have had our four months' course in the teaching district. I believe that the preparation of the staff work is one of the most essential things, especially for a small community. We have a population of three hundred thousand. In such a community you get a pretty good working knowledge of the social agencies and how you can use everybody else. I think that is about the secret of it. You do have to let a lot of things go until you get started, and we are beginning to feel that we just know what it is all about. We have divided the city into five districts with an office in each district and do you know what the nurses have said was the most helpful thing to them? We equipped their district offices with facilities for their lunches and they eat together every noon. They thought the school nurse in the district felt very superior to them because she was the specialist, but she comes in and eats with them now occasionally. The social worker in the district will come in and have lunch with us and we thresh out our problems together.

Each district has its own special problems and we found we could not lay down rules for each supervisor, and say she must do thus and so, because one district has poor white trash and you can not treat them the same as the Italian people. Then there are the Polish and the Jewish sections; there was another big rooming house section; so each district had to work out its own salvation. We formed a Council and said the supervisors might elect their own supervisor to represent them on this council; each district might have its own staff nurse representative. They worked out the program for their own staff meetings. We said they must not have anything that was not of general interest. All the nurses on the staff then began talking about dietetics. We saw that we, as nurses, could not do the whole work, so now we have three well trained dietitians, one of whom conducts the nutrition work in the course in public health nursing. The social workers are beginning to come in to parts of our course of study. Gradually, we have taken into the course one person after another, not nurses at all—some of these people who are working in dispensaries—that we might all get a general idea of what we are trying to do in

the community. Really, we do not know that we are any different now from the tuberculosis nurses. We do not think that any hospital is our hospital because we were trained in that school; they are all our hospitals. Then, too, the district nurses are not feeling that this or that is their hospital because they got their training in it. Their hospital is where they are working.

The other day the volunteer who drives for us (she has an old Ford which she takes full of children to the children's clinic) came to me and said, "Will you excuse me for butting in?" I said, "Everybody is privileged to butt in to our job who is going to give us any constructive criticism." She said, "That nurse wasted that doctor's time in the clinic because she did not send the record on the right form. The doctor there did not know anything about that child. I do not think that nurse ought to waste the doctor's time that way." I said, "You are right, we will not do it again." So, we sent a bulletin out saying that in one district a nurse wasted the doctor's time and one of our volunteers did not think it was quite right. Thus we are gradually building up a spirit of cooperation between all the workers. We all keep so busy we do not have much time to do any scrapping. No, we are not going to settle down into factional groups, nurses, social workers, etc. We are calling in people on case conferences. It takes a lot of time for case conferences, but, oh, the spirit of cooperation that you get out of these conferences. For instance, everybody may say you cannot help a certain family until you have a plan for it that is going to work. When you get the County Superintendent of the Poor in, he says, "Oh, I have known that family for fourteen years. You cannot do anything with them." Then, the man who is employing the father says, "I will give him a chance two or three months longer." That wakes up the social worker. She says, "Is that so? Well, if one of the industrial managers will give that man another chance after he has worked for him for four years and after all he has stood from him—if he will give him two or three months longer on this thing, I guess it is up to the nurse and social worker to go a little bit further to try to see what is the matter with the family." I think if you will try, you can arrive at a solution of your difficulties if you will get together in the right attitude, feeling that you are going to build up the community. It is not your organization, it is not the school nursing organization. It is a community thing. It is a wonderful thing if you can get this spirit, and anybody can get it. We have made a lot of mistakes. One of the organizations that disliked us more than any other, was asked by a doctor (when we were first sending our reports back), "How is that man we sent home from the hospital getting along?" What do you suppose it said on the record? "Clean sheets taken." That is what our nurse put on her report and the stenographer had copied it in a mechanical sort of way. We took the matter up in a staff meeting and the nurse said, "I did not know the report was going to the hospital. I thought you just wanted to register what we sent in from our Loan Bureau." It did go to the hospital and it was not of course the thing they wanted at all. Today we are sending reports to five different dispensaries and giving more nearly the material they want. We have taken two of our stenographers into some parts of our course in public health nursing and one of them is actually giving instruction to the students in how to write records and what is expected of them by the Main Office. It is working beautifully. She came to me the other day and said, "Since I have been teaching this record making, writing the daily records, etc., we are getting lots better reports."

Miss Nelson: Miss Laird, what do you think about the quality of your child welfare work in your system?

Miss Laird: I do not have anything to compare it with, because we did not have any child welfare work before, so I cannot tell you how we are doing it. I do know that we are now doing more child welfare work than anything else. When we started it was mostly tuberculosis, because a survey had been made and it was just piled on us. We did not see how we were going to carry the entire load, but gradually we have sifted it down. You see, we are doing family work and everybody is under our eye. In the family work we won't let a case be closed until we know what there is in that family. We include in our child welfare work prenatal and the postnatal service up to the school age child. We do not handle school children unless they are sick. If they are sick and the school nurse wants us to go in, we do. I guess most of the thirty school nurses feel we are doing quite a bit of work for them. When they go on their vacations in the summer, or when they take over their baby welfare work, they do the infant welfare work in the summer months and in those months they turn their school work over to us. We take children to the dispensaries to see about getting tonsils and adenoids out, and they take our infant welfare work away from us. We go ahead and do their school work, but probably not as well as they do it. Then we give them a record in the fall. In the fall they drop the infant welfare and take back their school children.

Miss Rand, Child Hygiene Division, Community Health Association, Boston: I think it is perhaps well for us to stop talking about cooperation and coordination and begin to use the words "comprehension" and "understanding." Most of these problems that trouble us are due to misunderstanding and lack of knowledge of what the other fellow is trying to do. If it is difficult to get cooperation from a doctor, whether it is in the rural community or in the city, it is time and time again because he does not know what we are driving at. If you go to him and talk the situation over with him, you often smooth out many difficulties that have been dragging along for weeks or months or years because you never took the time to get together and talk it over.

Miss Laird talks about the value of having lunches for the staff. I saw that situation myself in Toronto this winter. In the luncheon conference everybody got together and talked over problems and came to an understanding and a comprehension of what all were trying to do. We are so near our difficulties that we do not look at the big goal which we all really have. It is the same goal time and time again. We are all here because we are interested in the health of children. Therefore, if the nurses understand the administrator and the administrator understands the problem of the individual nurses in the field, many of our problems of administration are solved. If the nurse and the administrator understand the point of view of the doctor and if the doctor understands what the organization is trying to do, we often find that we have the same thing in view and that we can get together in our plans.

Mrs. G. A. Hipke, Milwaukee: It seems to me that generalization may be carried out very effectually in the educational field, but in bedside nursing we can accomplish our best only through specialization. I have mentioned previously that I am a specialist in maternity work. I believe that we can and do obtain the best results in this line when nurses specially trained in maternity work attend the

patients during their prenatal care, confinement and postnatal care. Patients recognize the difference between the general and the specially trained nurse. In maternity work I think we need specialization, and I believe that such work should be carried on through a special department and organization.

Miss Lockwood: The problem with us in Delaware is both a city and a rural one. It is the problem of a whole state. Only in the city of Wilmington will we have centers where nurses specialize. The nurses in the rural districts will be brought to these centers where there are specialists in tuberculosis, or to the Child Welfare Centers. Each will learn the other's methods.

I do think we have to keep in mind that there must be some specialists groups to study *standards*. I am glad that we can, at the present time, work at our problems in the city as well as in the country, because I think we need that thing. Just as soon as we all become generalized, there will be no laboratories working on the great things that we must learn in an individual way.

Miss Ada Graham, State Bureau of Child Hygiene, Columbia, S. C.: I think that there must be many people doing public health nursing, to whom it is a rural problem as it is to me. In South Carolina, out of forty-six counties, only seventeen have any county health service. In planning the most effective kind of work that we can do in the state, going into those portions of it where we have no health service now, we must arrange for a generalized program. Of course we feel that we must emphasize maternal and infant hygiene especially, because we are receiving the Sheppard-Towner money, which enables us to go into a great many counties that have not had much health work heretofore, but when a county makes an appropriation for one nurse, they do not want her to do specialized work. The nurse must be able to handle the various problems that she finds when she goes into a home, probably not as well as the specialized service would handle them, if there was a complete staff of specialists, but in a way that satisfies the people in these rural districts. It is natural that each nurse going into a county to do generalized work, should emphasize that phase of it in which she is most interested. We find that each one has more interest in the phase with which she is most familiar. In South Carolina we try to increase the amount of child health work done by employing, when we can, for a general service, a nurse whose former interest has been in child health work. When a nurse is taken on whose interest has formerly been in specialized service for the tuberculous, we find that her tendency is to continue to lay special emphasis on that work. Of course, we realize that this is not true generalized nursing which puts equal stress on every part of the program, but it is as near as we can come to it under present conditions. In time we hope to have a corps of specialists who can go into the counties, where nurses are doing general work and give advice and help along special lines, but we have not arrived at that stage as yet.

Miss Rand: I think we ought to be careful in discussing this subject that we do not think that the nurse who is doing everything that comes to hand is necessarily carrying on a generalized program. She might be doing bedside nursing and trying to do child welfare, and she might be doing tuberculosis, venereal disease, or school work, and I think that confuses us sometimes. In our discussion,

we think of any nurse who is doing some part of public health work as doing generalized work. She is not carrying a complete generalized program necessarily because she happens to be the only one in that district and is doing all that she possibly can, since she is probably overworked.

Miss Agnes Martin, Health Department, Milwaukee: Since the Sheppard-Towner money must be spent on child welfare, it would seem to me this would insure a larger amount of specialization, thus protecting the specialized program for child welfare work. In Milwaukee, we do what we call community nursing. This includes child welfare, school hygiene, tuberculosis, and communicable disease work. The prenatal and maternity work is done by a well organized Visiting Nurse Association. In such a program as this, I should like to know the best way to safeguard our child welfare program. I have just visited several cities to see how the various branches were kept standard in a community program and in each instance it was done in a different way. It looks, therefore, as if we would have to allow our development to be guided a good deal by the needs and opportunity for meeting them, found in our own community. I would, however, like to know what this organization would consider as safeguards to child welfare in the community program.

Miss Gertrude Hodgman, National Organization for Public Health Nursing: May I speak about something applicable to our discussion of the generalized and specialized organizations, and particularly the question of standards of nursing work and qualifications for it? My attention has been directed to the problem that we have in the training of every nurse today to carry on the functions which nurses have taken unto themselves and which they are the best qualified to carry on in relation to the care of children, maternity care, and so forth. In New York State, there is a law which requires that every nurse shall have at least three months' training in pediatrics. The supervisors in the state department have to arrange that the affiliation shall be made for schools that do not have a sufficient service in pediatrics. In New York State this means that over 100 schools have to affiliate, for pediatric service. A large per cent have been able to get affiliations, but in order to get the training the nurses are to be sent into Pennsylvania, Ohio and Canada. There are actually not sufficient children in the beds in the hospitals in New York State to train nurses. At the present time there are still hospitals that are not able to get affiliations. We had a meeting in Rochester just the other day at which the nurses from the training schools and the Public Health Nursing Association met and found that there are hardly a third enough beds in that city to provide the training for nurses in pediatrics. This is in a state where they are really getting after this problem, where they are really insisting that the nurses shall have training. I have no statistics at the present time, but I should say that probably half of the 15,000 nurses who graduated last June, did not have anything like a minimum of training in pediatrics before they graduated. How can we expect to develop specialists, or generalists, or anything else, unless the nurses can have adequate training? The New York State law requires three things in considering pediatric training. It considers the number of beds that a hospital has in which there are children's cases and it insists that these children shall be in a special ward and not mixed up in the hospital as is so often the case, where no adequate training in pediatrics can be given. Now, I wonder if all the nurses won't think of that in their own state and positively and constantly bear that thing in mind. There

is no place in the United States for a course in pediatrics for the specialists, where there were available facilities in hospitals and in the community for training in child welfare work. We find that the hospitals that are offering post graduate work to nurses are giving these nurses nothing but what is given to undergraduate students and therefore these courses seem to supplement the training that they already had; so, at the present time, we do not know where to turn to get, either in the hospitals or out, anything that will make a nurse a specialist to any degree. We talk about specialist and generalist, and I feel like saying, as Miss Rand said, "there just ain't no such thing."

Miss Lockwood: I think that those of us who are administering the Sheppard-Towner appropriation, have to watch closely that these generalized nurses do not become wedded to some specialized phase of the work. I have developed a system so that in each month a certain portion of the nurses' time must be devoted to the work under the Sheppard-Towner law. I do not know how that is going to turn out. As yet, from experience, I cannot tell you anything from the generalized plan. I am simply hoping to get a lot of pointers here, to try out and work on it. The only way that I can see for keeping in touch with the work is a record or time sheet; a system of keeping records of the nurses. At the end of their day, they have to show me how many hours they put in on such and such work. Besides, they must show the cases that they have cared for in the day and at the end of the day the number of hours are divided into so much "child welfare," "tuberculosis," etc. At the end of the month the amounts must correspond to a certain total time allotment to child welfare, to tuberculosis, and the other work. It must show that the "balance" is kept. If they are going a little bit too strong one way, they must be checked up. That is the only way I can see to keep any tabs on it.

Mrs. Hipke: I would like to know how we are to get material for the teaching of pediatrics in hospitals. A pediatrician suggested to me that because of the fact that most diseases of childhood are treated in the home, it might be a good plan to have student nurses care for the children in their homes—under the supervision of the pediatrician of the staff. In this manner, the sick get better care and the student will receive instruction in the nursing of children. I would like to ask whether this subject has been considered in the conferences of nurses.

Miss Nelson: I think, Miss Hodgman will be glad to take that up with you. That is part of Miss Hodgman's job as an educational director.

Miss Hodgman: We have been taking up those details somewhat. We thought perhaps it might be done under a well organized association. How it can be done in any other way, I do not know, considering the fact that probably more than 95 per cent of the care of children is given in the home.

**HOW CAN THE TEACHER IN SERVICE BEST SECURE HER
SUBJECT MATTER FOR TEACHING HEALTH?**

Round Table

JOHN SUNDWALL, M.D., Director, Department of Hygiene and Public Health,
University of Michigan, Ann Arbor, Mich., Presiding

HOW CAN THE TEACHER IN SERVICE BEST SECURE HER SUBJECT MATTER FOR TEACHING HEALTH?

DISCUSSION

Miss Sally Lucas Jean, Director, Health Education Division, American Child Health Association: 52 per cent of the teachers in America have not been trained to teach at all, according to figures of the United States Bureau of Education. We first want to make these teachers healthy human beings, since the teachers who have poor health, men or women, will probably not be enthusiastic about teaching health and we cannot expect them to teach it. How to improve the health of the teacher is one of the desired goals to be reached. As to the needed subject matter, there are a number of home economics workers here, and it would be interesting to know how far they go in helping the teachers. I know of a number of instances of splendid and stimulating work done by these workers in furnishing teachers with subject matter after which the teachers are able to develop methods of their own and successfully carry on the work.

Edla Anderson, University of Minnesota: The teacher in service can best secure her subject matter for health teaching from established health centers such as the American Child Health Association, the Elizabeth McCormick Memorial Foundation, extension divisions of State Universities which have a nutrition director, and from departments of home economics at State Universities. A teacher's institute is an ideal place to get a concentrated dose of health education subject matter when well trained health workers are obtained to give them instruction.

My work is nutrition and field work in dietetics. Before home economics girls take dietetics, they have to complete a number of courses in chemistry, biology, physiology, psychology, and nutrition in order to have a scientific basis for the practical applications in dietetics. We are especially interested in training these girls to go out as health teachers or workers, and they do the work in the pre-school clinics in connection with the Infant Welfare Society of Minneapolis, in which these students are given opportunity to go into the homes and teach parents what to feed their children and how to make them eat it.

The school work is done on the basis of classes for undernourished children. It seems to me that we are cheating the rest for only the undernourished get the benefit of health instruction. If a child is undernourished, he or she has a chance to go down to these classes once a week; these children are weighed and measured; they are given stars for following certain health rules. We have all kinds of contests, everything imaginable for interesting the children in health—songs, health games, plays. The students are responsible, and we try to make them see that it depends on them to make these exercises a success. Of course we have to help them out of their difficulties. But the point is that health teaching should really be in every single school room. It seems to me we should put health instruction into every school preparing teachers, every normal school and kindergarten training school, as well as every college and university; then we would be getting down to the crucial point of the health of the children of the United States.

Whether or not those girls are going to teach is not what we need to consider alone. We should take into consideration that a great number of the girls who are graduating from college and normal school are getting married, and they certainly should know how to feed, take care of, and train their own children. Health instruction really belongs in every single school.

Miss Helen McNair, Louisville, Kentucky: I teach science in two public schools in Louisville. By science, I mean health, sanitation, a small bit of natural science, nature study and health habits. I feel that last year we accomplished a great deal, but not enough, because of a lack of interest on the part of the school board and among the teachers. The teachers maintain that the preparation for teaching science is too difficult. To teach this subject efficiently, each one must have a great deal of background, biology, physiology, bacteriology, physics and chemistry. Yet, on the other hand, a college education including these subjects does not equip a person to teach health. She must have methods, as well as subject matter.

This problem of subject matter for the science teacher is a very vital one to me. I am at a loss continually to obtain outside material. There are no text books written that a child can read intelligently, not even supplementary books. All my work, therefore, has to be oral, with informal discussions, using the child's knowledge of his home surroundings as his text book. Frequently this knowledge is very meagre. To supplement it with actual subject matter is the problem.

Mary E. Freeman, Chicago: A brief survey of the elementary nutrition course given at the Chicago Normal College might be of some interest. It is a course offered to all students who are to become the regular grade teachers in the elementary schools. The necessity for this type of instruction is shown by the fact that many of the students come to us with two erroneous ideas. One is that all school children are in about as good a physical condition as they can be, or that when a child is below par physically, it must be largely due to heredity. To the average student there is little difference in the physical rating of a group of children. The other idea is that it makes no difference what a person eats so long as he feels satisfied.

To correct these impressions and to help the students see their responsibility as teachers for improving and conserving the health of school children, it seems advisable that we begin with a study of malnutrition, discussing such topics as causes, prevalence, effects of malnutrition and its remedies, and the school as a factor in overcoming it. As a result of this study, students are able to recognize children who are markedly below par physically and to cooperate intelligently with the school doctor and nurse and with the parents in behalf of the children's welfare. Moreover, she sees the necessity of stimulating the children's interest in the formation of health habits. With this introduction, the students are in a position to see that the type of instruction which so definitely benefits undernourished children is needed by all children.

In order to cope intelligently with the problem of the undernourished child, and to be fitted to assist all children actually to practice good health habits, the normal school students need to acquire a knowledge of diet in relation to health and growth, standards of sleep requirements for children of various ages, and other hygienic factors which influence health. As a result of this information, the students develop the right attitude toward health. Frequently their attention is directed to

their own health condition. Often, after making a survey of their own habits, they proceed to correct those at fault. Thus personal application of health information is made.

Further, our course includes a brief survey of methods and devices for interesting children in forming good health habits. We have found the bulletins on health education printed by the Bureau of Education to be invaluable in this respect. This splendid store of material can be put into the hands of all the students, thereby acquainting them with the type of health education which can be, and is being, carried on in classrooms throughout the country.

Dr. Bessie Noyes, Greensboro, N. C.: We are trying to base our health teaching on individual performance. It may sound rather amusing when I tell you how we start out. The girls are college girls, and the one thing they want is to be good looking. Why not begin with that object? In order to be good looking many things are necessary. For instance, they have to stand up straight; you should see the posture of the girls on the campus improve. We have a camp and give camp privileges. To get to that camp for one week means more than studying; a certain amount of physical exercise is necessary. Our girls are not very keen about that. They have to walk, and have to do a certain amount of work in the gymnasium class; they have to keep their efficiency up or else lose a week in the camp. We have a way of checking up the deficiencies of each individual and she must measure up. In the health class, health problems are discussed. A period of cold weather means many colds. At such a time we have taken up the subject of infectious diseases, centering the discussion around the colds the girls are having. This topic necessarily leads to the subject of proper clothing and proper bathing. You should hear the teachers in the dormitories tell about the rush for cold baths.

The principle is applied in all our work; the real starting point is the girls' idea of being good looking. I don't know whether it is going to be effective, but I rather think it is. We have people to hold individual conferences with the girls. Perhaps they meet the girl only once a month or once a year, but they get a lot out of her. We deal with the girls individually until they really know how to apply these rules individually. They keep their weight curves, although it is not always advisable to start out with weight curves.

Our girls have to eat in the dormitories. Their meals cost them about 15 cents. A problem that has always worried me is involved in the fact that the girls have money to buy candy and ice cream and one does have to push the campaign in the little store.

Mrs. John Collier, Far Western Representative A. C. H. A., San Francisco, Cal.: I want to tell you about a Beauty Score Card used very successfully in the State Teachers College, San Francisco, which could be used in teachers' health clubs to arouse interest in individual practice of health habits. Miss Mary I. Preston worked out this score card as a practical device for motivating a course in modern physiology and hygiene.

The following challenge was flung to the students the first day of the class, "Are you as attractive as nature intended you to be? If not, why not? Score yourself!"

You can imagine the amused but real interest aroused. The girls then and there divided into groups of four, with score cards in hand to rate each member of the group in turn—so many counts for nails, skin, posture, et cetera, covering

all the physical points that are effected by the practice of health habits. They were tremendously interested in the scoring and in their own scores. A new scoring was made each month, so that they might note how the practice of health habits brought up their scores toward the coveted 100 per cent.

Such a score card could put real life into a teacher's club. I have watched the principal in a big school actually make over the health of her teaching force through interesting them in their own practice of the health habits they were teaching in the classroom. There had been frequent absences for colds from the teaching staff in that school, but these were materially brought down by the principal's health campaign. I would like to see home demonstration agencies, Red Cross agencies, et cetera, promote teachers' health clubs. I know the teachers would welcome them. I know they would succeed. Success is just a question of making a live appeal.

Dr. F. Elizabeth Barrett, Kalamazoo, Mich.: I have been watching this health movement for twenty-five years with great interest, and have given a great deal of thought as to whether or not our health workers have the necessary knowledge of physiology. Do our teachers understand physiology as they should? Can they teach health without a knowledge of physiology? Is it taught sufficiently in our public schools today?

Mrs. Flora J. Diefenderfer, State Superintendent of Child Welfare of the Pennsylvania W. C. T. U.: Since I have been in this convention I have been told of a young woman, an instructor in one of the colleges, who uses cigarettes, and claims they do not injure her. She therefore intends to use them as long as she thinks they agree with her. I think that is a question—is smoking good for the body? I hope that the teachers are stressing the point that cigarettes are injurious to the body. And I am astonished to learn that any instructor in a college, teaching young women, does not object to the use of the cigarette, but rather encourages it, and that young women come under this influence.

Dr. Franklin W. Barrows, Albany, N. Y.: I agree with Dr. Barrett, of Kalamazoo, in her question which implies the answer in the way she asked it—the question, whether our teachers know as much of physiology, as they ought to know in order to teach health adequately, or whether they know the fundamental facts of anatomy without which physiology is difficult to understand, and, in fact, meaningless. I realize I am getting on the wrong side of the question, because we are aiming to teach health, and we are trying to eliminate just as much of the dry bones and just as many of the technical terms of physiology as possible—trying to reduce them to a minimum in order that we may emphasize health. But we are not going to emphasize health without a knowledge of anatomy and physiology, and, above all, without health in ourselves.

Will you be patient with me for a moment while I mention a few discouraging things I have observed in teachers lately?

A few years ago I had occasion to look after a camp in which we had a number of scarlet fever cases. We were taking care of 250 children there, and when the camp was quarantined and before the quarantine was very rigidly enforced, a school teacher, a most admirable young lady and a friend of mine, gave money to several of the children in her charge so they might skip out and get home "before the trouble began." When the trouble did begin, the children were taken care of, the scarlet fever was soon checked and many children ready to be sent home safely.

Here was a teacher absolutely misconstruing the entire reason for quarantine, the entire problem which was present in communicable disease, and as a favor to her children doing the very worst thing that could have been done in the circumstances. That is one case of a teacher who was doing "health work" in a bad way.

I was talking to a principal not long ago whom I asked how many corrections he was getting. He said, "Well, we are doing fairly well, having tonsils and adenoids removed, and now we have the children examined for glasses. But I do one thing. I take all of the recommendations to be sent home to parents in regard to eyes and I go over them myself, and if I have any children with good black eyes I don't send them home. You know as well as I do that good bright black eyes never go wrong; they are always healthy." I said, "Say that again." He said, "You know; you have noticed that, haven't you?" I said, "I have not noticed it. I am surprised to know that you have." I couldn't talk health to that man very long. He got mad at me, for being a doctor, I presume.

One other case. A superintendent of education talking of health service, said to me: "We want better health service for our school; we want to teach health habits. The doctor is not doing his work very well. We want to have defects corrected." I said, "That is a good idea. Better get a better medical inspector and have the children examined every year." "No," he said, "I suppose it is a good object lesson, but I would not want my own child examined once a year." A school nurse who was sitting next to me—you ought to have seen how she looked—said: "You would take your automobile once a year to a repair shop and have it put in shape?" "No," said he, "I would not if it would go."

Where are the teachers on the anatomy question, and then on the hygiene question? Should we not begin by training teachers to teach in our normal schools and training classes? And those untrained people who do not go to normal school at all before they go out to teach in rural districts—we are not preparing them sufficiently. Should not the first thing in the normal school course be a thorough medical examination in order that the student should know, for the first time in life, what kind of a body she has, and how to keep it in as good shape as possible? Dr. Sundwall has written on the subject. He can tell you what an examination for a college student ought to be, and how the health of college students ought to be maintained at the highest possible maximum. But our normal schools have not yet fallen in with this idea.

Shall we ever get this thing done right until we have a new generation of teachers? I think we shall, through literature, meetings, conventions, getting people together as often as we do in this state, and in many other states throughout the Union. We may even take the half-hearted teacher with her poor, miserable body and her lack of health habits, and put her in shape fairly well to teach her children health habits. This matter of keeping your own body in health is the most important phase after all. I have been disappointed to see the extremely simple, ordinary work that is going on in health teaching in some of our high schools in the State of New York. It ought to be very much better, much more scientific. If you will go with me to some high schools—I won't mention them—I will show you boys and girls preparing to graduate who spend such time as they can spare in biology, trying before it is too late to form health habits. This training, of course, should have begun as soon as the school had hold of the child, and not have been deferred until the young man or woman was ready to graduate from high school.

Let us reach out for all the excellent material the Child Health Association has prepared for us. Let us learn to discriminate against much of the newspaper and magazine stuff which, I am sorry to say, is placed before us. I am deeply disappointed to find many intelligent people using material in health work that is quite erroneous, which they ought not to have gotten hold of in the first place. If teachers are in doubt as to what they ought to read, I think it is a good sign. Meetings like these help to direct their reading.

Mrs. Cordelia M. Creswell, Supervisor of Special Classes, Grand Rapids, Mich.: I do not think Dr. Barrows would mean to limit the training in normal schools and colleges to teachers, because we overlook the fact of how much responsibility is being put on parents. And I cannot, for the life of me, see why fathers should not have a good education along health lines as well as mothers.

Miss Mary E. Stebbins, University of Missouri: Along that line I think there is another opportunity to teach health, and that is through the boys' and girls' clubs. Boys as well as girls, because boys are going to be parents too, aren't they?

We hope to work that out in Missouri. The Extension Service of the Universities has already been spoken of once or twice. That takes us directly into the rural communities, and one of the functions of the service is to develop boys' and girls' clubs, with members from ten to eighteen years of age.

This year we hope to make health a definite part of the program of every club, stressing the practice of the health habits, these boys and girls to score themselves on these practices and the progress they make through the year, as they already do in the regular club work, be it poultry, pigs or calves.

It is customary to have a sort of elimination contest in the counties. The winning team in the county is sent down to the State Fair. The winning team at the State Fair is then sent to the Inter-State Fair. With health scoring such as we propose, no team can win unless the children are practicing the health habits and making definite progress in their own physical condition. Certainly, not being county winners, they will not be eligible for the state and inter-state contests, therefore those going in for the state and inter-state contests will have to be physically fit or on the way.

We do not propose to teach physiology and hygiene as such, but to insist on the daily practice of the health habits.

Dr. G. C. Snow, Michigan State Normal College: I agree with Dr. Barrett that at least enough of anatomy and physiology should be taught to teachers so they would not make some of the mistakes of which one hears. In hygiene classes we frequently ask the girls preparing to be teachers to place their hands at the upper and lower levels of their lungs. This they do by placing one hand about the region of the fifth rib, the other over the tenth or eleventh rib. We say then, "What is above that?" They then look astonished and admit they don't know. They ought to know enough at least, not to say as I heard one say, "Now take a deep breath and fill your diaphragm."

The State Normal College at Ypsilanti requires all students to take hygiene except those specializing in languages and history. Why they do not require it of these also, I do not know. In these classes in hygiene we try to get the student to take an interest in herself first. We give a girl a higher grade who attends classes without a cold throughout the entire course, or is not absent because of illness. We

try to make her know that the children who are to be under her charge ought not to have to give up a bit of their physical well-being in order to make progress in their studies. We try to make her see that every child who comes to her in September ought to make visible and apparent progress in health before he leaves in June; that she ought to grade the child in health, just as she would grade him in arithmetic or language or any other subject she teaches.

One other point is that you can not teach health in fifteen minutes a day, and you must have the ideal of health in your own mind, so that it will promote and color every point in your teaching throughout the day, whether you are teaching arithmetic, geography, or grammar.

Miss Mary E. Murphy, Elizabeth McCormick Memorial Fund, Chicago: I think there is a phase of the subject supposed to be under discussion which we have not yet touched upon. In our discussion thus far we have spoken of the training of teachers who have not yet entered the teaching field. My understanding of the subject is rather—What are we going to do to bring fundamental subject matter on health to the teachers who are now in the schools? We cannot keep these teachers from teaching health, whether we wish to or not. The interest in the health of children has been so ably aroused that teachers are interpreting their duty to the individual child in the school partly in terms of his health condition and improvement. And yet, what many people are afraid of—and probably rightly so—is that in their very enthusiasm the teachers will go beyond the mark and convey unsound facts. The main point of the discussion is—How can this be avoided? How can teachers be safeguarded in their health instruction, for which they themselves possibly have had no special training, but in which they will want to take part to some degree?

One suggestion, it seems to me, is to be found in the field of the specialist, already existing, at least in the city school system. Should not a large part of the function of the specialist be the training of the teachers in at least an elementary understanding of the specialized subject, so that sound facts may be made the basis for such health instruction as the teacher in turn passes on to her pupils? This training of teachers may be made possible through material submitted to the teachers, periodic meetings or regular classes in charge of the specialist. In this way, the specialist, whether it be the teacher of home economics, physical education, physiology or other sciences, or the physician or nurse will be the interpreter of the more specialized field to the large group of teachers. In the rural communities, where such specialists may not be so available, the suggestion already made by Miss Jean, of clubs, is valuable. Through such clubs, meeting periodically, whatever scientific knowledge touching the field of health education is available to the rural community can be passed on to the teachers.

Miss Maud Brown, Fargo, North Dakota: I think Miss Murphy has hit the nail on the head when she speaks of the difficulty of the teacher who is right now at work, not of the teachers who have normal training. When they are brought into contact with expert supervision, they are on the right road. But it is the teachers in nine hundred and ninety-nine places out of every thousand who are out of reach of expert training and expert supervision who are dependent upon literature. And the literature that is at present in the reach of teachers is most puzzling and contradictory. The teacher has to have a deep down, fundamental training in science in order to discriminate as to what literature is sound and what is not. So, I think one big thing that the American Child Health Association has been doing is

supplying that lack. I think that there is still another gap that is in need of filling, and that is in training, for instance, the teacher of the junior high school, or the eighth grade teacher. There comes a time when we cannot depend alone on the children through their love for us and their desire to take our word for it, but must have scientific reasons why, and that is not to be found in the literature which is at present available to the teacher in the nine hundred and ninety-nine small towns scattered throughout the country. I am glad to know there is material of that sort under preparation in Miss Jean's office, and I hope in a great many other places. It certainly is needed, as anyone who has been examining text books, for instance, in physiology, must know.

PUBLIC MEETING

President, the Honorable HERBERT HOOVER, Presiding

ADDRESSES OF WELCOME

The Rev. William D. Maxon, St. Paul's Cathedral: I have a very brief duty to perform in the absence of the Dean of the Cathedral who is otherwise, to his regret, occupied.

I have the privilege of extending the hospitality of the Cathedral to the representatives of this great national organization on behalf of child welfare. It is very fitting indeed that an association concerned with the conservation of child health should hold a public meeting in the Cathedral. Very near indeed to the heart of Christianity is the wonderful work represented by this Association. The Church, embodying the spirit of Christ's humanity, may very well accord a most cordial welcome to those who are engaged in this most necessary and ennobling work on behalf of a better world. I have great pleasure in extending this invitation to you in the name of the Cathedral. It is particularly gratifying to have with us the President of this Association, whose work on behalf of humanity is known throughout the world and it is helpful to us to have his presence here in the Cathedral. As we are in the House of God, the House of Prayer, I shall ask you, most happily I trust, to rise as we repeat together the prayer of Christ's universal humanity, the Lord's Prayer.

Dr. Francis Duffield, President, Detroit Board of Health: Detroit is enjoying a great privilege tonight. The American Child Health Association, in holding its first annual meeting here, has paid a great honor to Detroit. We await hopefully the result of your deliberations, knowing that they will be well worth while. We actually look forward to your criticism of this city's attempt to improve the health of its children. As Stevenson said, "To travel hopefully is far better than to arrive. Your true success is in work." Members of the American Child Health Association, we are glad that you are here.

ADDRESS

The Honorable HERBERT HOOVER, Washington, D. C.

To those of you who have not participated during the day in the meetings of the Association, I might repeat that this is the first annual meeting of the unified societies devoted to child health. It is composed of organizations which have been giving service many a year to these problems of American life, but whose activities, it was thought, could be brought to greater fruitfulness if they had larger unified effort, covering a larger field, and covering that field with greater strength. The unification brings into cooperation the great bodies of our physicians, our health officers, and our educational authorities. The Association is devoted to one primary proposition, which is the organization of the moral force in each community for the better protection of child health as the foundation of progress. There are many functions which cannot be served by individual action. The prevention of infection, the provision of a better water supply, sufficient quantities of pure milk, and a score of items, can only be perfected and improved by the action of the community as a whole. Governments and city authorities cannot go further than public understanding, public spirit, and public demand, and it is, therefore, the function of this Association to bring about that understanding in the community which leads to better and more efficient community action. Good community action must be based upon full realization of sound and practical measures. Idealism in these problems of social progress must have its root in ruthless realism and in scientific research. Practical experience must precede action and this principle is carried out in the organization of associations for the purpose of scientific research and investigation of community problems, that the experience of one community may be applied in another.

We are endeavoring to found this movement in practical experience rather than in the enthusiasm that sometimes comes from association of effort devoted entirely to sentiment and idealism. But these measures can succeed only by the summoning of the moral forces of the community. Indeed, the progress of our nation and the progress of the world today, is a practical mobilizing of moral forces.

We are realizing more and more, as time goes on, that force, compulsion, autocratic action of government, of bureaucracy, are no solution for our social problems. We know now that a community nurse is better than a dozen policemen. We know now, if we can build our children in sound health and in sound mind, if we can summon the moral forces of the community for complete action in these directions, we can give protection not only to health, but to the spiritual forces among our children; that if we could secure these results in their perfection for a period of only a score of years, we could speed civilization a century.

It is true we never can attain the ideal, but it is only through the willingness of men and women to serve, that we can hope to make progress, step by step.

Mr. Hoover: I have the privilege of introducing to you now, Dr. Vincent. Dr. Vincent has given his life to problems of public health and public welfare. As the head of the Rockefeller Foundation, his inspiration has been perhaps a greater contribution to the public service, to scientific research, to medical education, and to public health than that of any other man in the whole world. The benefits which flow to the American people today in an unending stream from the efforts of the Rockefeller Foundation are greater, perhaps, than any forward action yet taken by man in the name of charity.

It is a great pleasure to the American Child Health Association to have with us so great an inspirational force in the public health world as Dr. Vincent.

THE MODERN HEALTH MOVEMENT AND THE AMERICAN CHILD HEALTH ASSOCIATION

GEORGE E. VINCENT, Ph.D., President of the Rockefeller Foundation, New York City

It seems well to discuss briefly the significance of the organization under whose auspices this meeting is being held in the health movement of the nation as a whole. There will be no attempt to deal with the history of preventive medicine. Attention will be directed to comparatively recent developments.

The discoveries of Pasteur provided a scientific basis for the modern health movement. The administrative experience of Great Britain made an important contribution; in the United States, Massachusetts, about the middle of the last century, took the lead. Since then this country has played an increasingly significant part, both in scientific research and in technical and administrative procedure.

During this period the general death rate has steadily declined; infant mortality has been cut in two; and there has been a notable decrease in sickness and suffering. While conscious measures of prevention do not deserve the entire credit for these achievements, undoubtedly they have been the chief causes of improvement. Better housing, a higher level of wellbeing, and other social and economic influences are also to be taken into account.

The modern health movement has called into existence a widespread machinery: governmental agencies, local, state, and federal, have been created; numerous unofficial societies have been organized; thousands of men and women have been called into service. When one remembers that this personnel has until recently been self-trained rather than professionally prepared for its work, the showing must be regarded as most creditable.

The rapidly expanding work of prevention has called for large sums of money; public and private resources have been expended in steadily increasing volume. Everything considered, the results have been more satisfactory than might have been expected. This is not to say that complete efficiency and economy were achieved.

As a matter of fact there have been many unfortunate features: research has not always kept ahead of a desire to do something immediately; often government officials and voluntary societies have worked at cross purposes; there has been duplication of effort; sometimes

neglect of important fields. As has been suggested, officials and other workers were frequently amateurish, untrained, inexperienced.

Unfortunately spoils politics sometimes interfered with efficiency; the temptation to make unsupported claims about results accomplished has not always been resisted. Independent and frank appraisal has been almost resented. Health literature for schools and individuals has been too generally dull and forbidding; education of the public has been for the most part unskillful and boring.

There has also been a regrettable ignorance and credulity with respect to scientific work. Under the conditions of modern life, specialized and complicated as it is, no individual can hope to have an authoritative, first-hand opinion about more than one or two subjects. He must therefore select and trust authorities. He shows his intelligence by the kind of persons and institutions from which he accepts statements of fact and opinion. The education of the public in health matters aims at developing such an intelligence—not in making every individual a specialist in medicine and epidemiology.

Again, private health agencies have often taken the wrong attitude toward the public authorities. Only in cases of extreme incompetence and corruption ought the authorities to be attacked. It is the duty of voluntary agencies to cooperate even under discouraging conditions. The wisest course is to create a popular expectancy that the public authorities will do their duty. This policy is psychologically sound and in the long run effective.

It is also true that the voluntary agencies have been multiplied—probably excessively. They have failed to develop team-play; they have hesitated to examine their own work and have been a little resentful of appraisal from without; they have sometimes forgotten that it is their function not to relieve public authorities of their responsibilities, but to make demonstrations, to arouse public opinion, and to secure support for official health programs.

But these things are being steadily remedied. It is now generally agreed that the success of public health work depends upon the realization of the following conditions:

1. An adequate and verified scientific basis.
2. Team work among all the agencies involved.
3. Transfer to the community of activities which voluntary societies have shown to be effective and feasible.
4. A professionally trained personnel of health officers, doctors, statisticians, laboratory workers, nurses, health teachers and others.

5. Continuous and critical testing and appraisal of results as a means of confirming, correcting, or completely changing methods of procedure; and

6. Constant and consistent instruction of children and adults, and the education of public opinion.

THE POLICIES OF THE ASSOCIATION

The program of the American Child Health Association adapts itself admirably to the general public health movement in the United States and consciously seeks to follow and develop the policies which have just been outlined. The plans of the Association get their appropriate setting in the national health campaign as a whole. Until certain of the fundamental things, such as pure water and milk, proper sewage and refuse disposal, food inspection, the control of communicable diseases, have received attention, special safeguarding and fostering of child health can not be satisfactorily accomplished.

The Association, not satisfied with existing knowledge, proposes to press upon scientific investigation problems of nutrition, growth, weight and height; questions of dental and other defects—in short, to make sure that programs do not outrun or contravene well tested scientific truth. It means to waste neither time nor effort upon half-baked projects.

Having set an example of team work by incorporating two voluntary child health societies into a single organization, the Association seeks in every way to cooperate with both official and non-governmental agencies to promote a common cause. It lends members of its staff to counsel with municipal and state departments as well as with private organizations. The same officer represents the Association and the professional Society of State and Provincial Health Officers. A spirit of mutual confidence and good will is being rapidly developed.

Drawing into its own service persons of training and experience, the Association realizes that only professionally prepared workers can be counted upon to do things effectively. Hence universities, colleges, and normal schools are being induced to organize courses of instruction especially adapted to the needs of a health personnel. The Association wisely offers fellowships and scholarships to selected doctors, nurses, health instructors, and others who wish to prepare themselves for child health careers.

One of the distinctions of the American Child Health Association lies in the fact that it has made the literature of child health, posters,

primers, cards, alphabets, and so forth, fascinating and artistic. It has also devised health clowns, health fairies, health plays, and health pageants. It has insisted that inculcating health habits in young children should be the primary aim of instructors, and has stood for the training of a new type of health instructor skilled in all the methods of influencing the young. The educational program includes the enlightening of parents and of the general public.

Perhaps the most notable item on the Association's program is a department of investigation and appraisal. A special staff will study continuously the things which the Association is doing. Tests of results will be devised and applied. Demonstrations which are being carried on in Mansfield, Ohio, Fargo, North Dakota, and elsewhere will be subjected to scrutiny. The actual effects of educational campaigns in given schools and communities will be appraised so far as significant means of measurement can be discovered. This frank determination objectively to examine its own work inspires confidence.

All who are concerned in the promotion of public health in the United States and other countries welcome heartily and hopefully this recently unified and expanded agency for promoting child welfare. Its program and policies are not the result of impulse or sentimentality. The organization makes no pretense to final wisdom. It proclaims no millennial dawn. It proposes with the knowledge available to carry on carefully and conservatively various promising types of service, to make experiments and investigations, to observe results attentively, and to be guided in its further campaigns by the outcome of its earlier efforts and by the experience of others. It is a fine and inspiring example of sound sentiment under the control of the scientific spirit.

ADDRESS

**JAMES FITZGERALD, Executive Secretary, Child Caring Department,
Society of St. Vincent de Paul, Detroit, Mich.**

After the judicial pronouncements of Mr. Hoover and the brilliant advocacy of Dr. Vincent, I come to the stand simply as a witness, out of a daily experience with the disadvantaged children of Detroit, to give testimony to the efficacy of the health resources now existing in the city.

There are in Detroit at present some fifteen agencies devoted definitely to the full time care of dependent and neglected children. They are private agencies, most of them members of the Detroit Community Union, and their operating deficits are defrayed by the Detroit Community Fund. But, in what I have to say, I am thinking especially of those agencies which maintain no institution, but do case work with children prior and subsequent to placement and maintenance in licensed, supervised, private homes. There are four such: one under Jewish auspices, two under Protestant, and one under Catholic. There are at any one time in the care of these agencies, about 3,500 children.

Where do they come from? Despite all our enlightened advance in social theory and social practice, homes do break. These children are the smaller pieces gathered up after the catastrophe. As far as the actual job with the particular child is concerned, it isn't the breaking up of the household that matters so much. If an average, sound home should suffer sudden disruption, there would not be presented very difficult problems of aftercare for the children. But in most cases, the break does not happen on the instant; most broken homes have been for some previous period badly "bent." Now a child cannot grow up straight in a badly bent home, and so the child that comes to the children's agency is, in most cases, badly bent, warped, stunted, low in resistance, and if not definitely ill physically or mentally, is more prone to illness than the average child. These are the untrained children, the disadvantaged children, the children low in resistance, the diseased children—the whole scale of human ailments are represented from scabies to tuberculosis, from the problem child to the definitely feeble-minded.

And why do they come? When we analyze the immediate causes that send them to the children's agencies, we find that in about fifty-five out of every hundred, the reason is the sickness or death of the parents.

health dispensary and must conduct its activities in close alignment with infant welfare and public health agencies. Indeed it must be converted into a child hygiene agency which will have a new concern for physical soundness and mental health. To realize this destiny, it must come more fully under medical and nursing influence.

In view of these possibilities, the new nursery school movement, both in England and in America, takes on considerable significance. The nursery school as a public hygiene agency has received the official sanction of Parliament through the Education Act of 1918. In our own country, it is altogether on a voluntary and pioneer basis. One of the most notable of all nursery schools is the Merrill-Palmer School of Detroit, which was established in 1921, and reflects the vision of its donor. This nursery is demonstrating the possibility of adapting medical and educational procedures more systematically to promote the development of children from two to six years of age and also to train the present and future parents of such children.

It is too early to assess the work and the significance of the nursery school and, at present, we may regard it sympathetically as a kind of third party movement through which the full responsibilities and opportunities of the American kindergarten will be made more clear. We do not so much need the nursery school as an additional and separate agency, but we may need it as a stimulus which will bring the kindergarten to a prompter realization of its functions in a program of pre-school hygiene.

3. PARENTS

Finally, the welfare of the pre-school child will be intimately dependent upon the character of his home and upon the intelligence of his parents. The administrative task of pre-school hygiene resolves itself largely into problems of parental guidance and pre-parental education.

From the broad standpoint of public policy, no more far-reaching measure in behalf of the children of the future can be instituted than a systematic and sincere type of pre-parental education. This education must be so conceived and so administered that it will reach the little mothers in the grammar grades and girls in high school, normal school, and college. It must reach also the boys.

By developing the possibilities of a periodical health service and by bringing it through the kindergarten, into living relations with our vast public school system, we shall be able to meet more completely the needs of the pre-school children of the future and of their parents.

ago, was then already badly bent. They lived in that badly bent environment ten and twelve years, respectively. Feeble-mindedness of the mother and shiftlessness of the father, poverty, neglect, bad housing, poor sanitation—all these appear in their social history. When they came, at last, to the care of the children's agencies, the general routine examination disclosed one positive for syphilis, the other with a paralyzed arm, a souvenir of infantile paralysis, both infected with incipient tuberculosis, both with a variety of minor physical defects. From the date of that examination, the following health resources have been marshalled to the service of X: Children's Free Hospital, Department of Health Venereal Clinic, University Hospital, Ann Arbor, two specialists in private practice, Board of Health Tuberculosis Clinic, a dental clinic, an eye specialist in private practice, St. Mary's Clinic, St. Mary's Hospital, and the Wayne County Psychopathic Clinic.

For the service of Y have been enlisted St. Mary's Clinic, Board of Health Tuberculosis Clinic, dental clinic, two specialists in private practice, Sigma Gamma Clinic, St. Mary's Hospital and the Wayne County Psychopathic Clinic.

I caution you against the thought that this meant a "shopping around" with the children—nothing of the sort. During the two years, these children have been under the attention of the same nurses of the agency staff, and the enlistment of each new agency was under the recommendation of a previously interested agency or physician, and each newly interested agency has had a detailed history of the children up to date.

What is the result? The appropriate health agencies have corrected all minor physical defects and they continue to attack the serious defects with increasingly favorable prognoses.

To cite another instance, the Children's Agency each summer selects its incipient and suspicious tuberculosis patients and its undernourished children and sends them upon invitation of the City Board of Health to the Preventorium at Northville for eight weeks of intensive attention to nutrition and reduction of underweight. And then an instance from the other side of the field. There is the case of A, a little boy who suffers with arthritis, who has never walked nor ever will, who lies always on his back, unable to do a solitary thing for himself. Everything that science could do for him, for instance, at the Children's Free Hospital and the University Hospital, having failed, it became necessary to make a plan for the short years of life before him. He cannot be cured; his case is hopeless. Well, what was done? He

has been for a year, he is tonight, at the Crippled Children's Camp, on the shores of Lake Huron, where a veritable heroine, a Protestant young woman, gives him personal, intelligent care, where he is visited every week by one of Detroit's busiest and most noted specialists, where public school teachers from Port Huron go out every day to instruct him, where the Catholic priest goes regularly to attend him spiritually, where he is supported half by juvenile court funds and half by the funds of a private Catholic children's agency.

I do not cite this case for its heart interest, nor as evidence of how free we are from sectarian narrowmindedness, but for the very same reason for which I cited the other cases, namely, to testify graphically to the policy of the children's agencies of Detroit, which is to keep an eye single to the better health interest of the child, and to that end, to marshal around it every appropriate resource in the community for the child's mental, physical and spiritual health.

I quote from an, as yet, unpublished report of a study of a Detroit child caring agency, recently completed by the Children's Bureau of the Department of Labor.

This agency is happy in its working relations with the other social organizations of the city. It is a member of the Detroit Community Union, and a beneficiary of the Detroit Community Fund. It has joined with the other child placing members of the Detroit Community Union in working out a friendly arrangement, whereby applications for foster-care of children are referred to the society representing the faith of the child's parents. So cooperative are its relations with the juvenile court that it places in its boarding homes some of the delinquent wards of the court who are supervised jointly by the agency's visitors and the probation officers of the court. Another unusual piece of cooperation is the assignment to the agency, for full time duty, of three registered nurses from the staff of the Visiting Nurses' Association. This is all typical of the general spirit of "give-and-take," which seems to pervade the work of the social agencies of the community and which is an important factor in meeting the needs of the handicapped children of Detroit.

What is the result of this "give-and-take," this marshalling of the appropriate available health resources of the community for the benefit of the children?

Here it is in one extremely significant sentence. The mortality rate among the previously disadvantaged children in the care of the children's agencies of Detroit is appreciably lower than the general death rate of Detroit children under fifteen years of age. Specifically,

in 1921, the mortality rate in Detroit for children under fifteen, was 13.0; among the children of the Agency it was 6.0.

Is not that important testimony to workers in a great crusade for children's health? Is that not an argument for use in preaching to parents the message that if they will give ordinary attention to the health of their child, and if they will use, when symptoms of ill health appear, the health resources of the community, children's health in their community will be appropriately restored, protected and promoted?

SIGNIFICANT COROLLARIES

There are certain corollaries to that general testimony. They are all the more clinching, too, in the light of the failure of the children's agencies to go farther in their policy than they do at present. For I am quick to confess their shortcomings. Some of them are to be laid directly to the agency, some to general circumstances (like pressure of numbers to be cared for), some to particular circumstances (like removal of the child from care before a plan of treatment can be put well under way, or like parental objection too deeply rooted to be overcome). But despite these obstacles, despite the presumptive unfavorableness of the subjects from the health standpoint, the average of health among these three and one-half thousand children is as high as, if not higher than, the general average of child health in that community.

The first corollary is that, from the experience of children's agencies, it is seen that the correction, protection and promotion of child health is not an especially difficult thing. It means pretty generally nothing more than the removal of environmental handicaps, the early correction of beginning defects, the early training in right health habits. Nowhere is the fact of the inherent natural tendency in the child to normal growth more strikingly demonstrated than in work with these children. Seriously disadvantaged they may be, when they come to the care of the agency out of their badly bent environment, but place them in even a fair environment and give them ordinary supervisory attention, and how quickly they straighten out in physical and mental health and in conduct. They are like those dolls fixed on heavily weighted half-sphere bases—you push them down until they lie flat, you remove the pressure and they rise, swing back and forth a little and then settle at length straight upright. Nowhere is it truer than with the disadvantaged child that in most cases he doesn't need things

done to him, but a chance to grow naturally; nowhere is the health worker's best ally better seen to be "nature's cure of disease."

That is a corollary that is significant for use in your crusade for health among the people generally, and those of foreign birth particularly. Health is not something outside of us to be poured back into us out of a bottle like gasoline into an automobile, but health is something within us; it is not something to be given us, but something we have within us waiting to grow. Too much care cannot be taken that our instruction to foreign groups, especially when that instruction is couched in technical language, does not defeat its own end by increasing the idea among simple people that there is some sort of hocus-pocus about this whole health business, that it is something artificial rather than natural. It is very easy with simple people to make strange under new names that which would be familiar under old names.

Gilbert Chesterton touches on this in doggerel:

"When science taught mankind to breathe
A little while ago,
Only a wise and thoughtful few
Were really in the know;
Nor could the youth his features wreath,
Puffing from all his lungs beneath;
When Duty softly whispered, 'Breathe!'
The Youth would answer 'Blow!'"

It is not necessary to append Josh Billings' famous footnote, "The above is writ sarkastick."

And another corollary. I trust I have left in your minds the thought that the children's agencies in Detroit have grasped the importance of attention to child health. But workers in children's agencies are saved by force of circumstances from attending to child health to the exclusion of all else. They have to consider the child as a whole, and his health as a part of that whole. They must attend to his spiritual growth, to his education, to his conduct and habits to say nothing of attending to his feeding, clothing and housing. Besides, and of extreme significance, they must, in adapting to their practice the sound programs developed by educators, sociologists, research workers, medical experts, etc., do so with due and careful regard to things as they are in particular cases. I have often wished that child health program makers might sit some day in our juvenile court, and hear the judge trying to get (through an interpreter) the consent of a pair of unde-

niably affectionate parents to a necessary operation on their child. "Why cannot he just order the operation over their objections?" That is the typical response of the program maker in his impatience at being balked by an individual case. In some instances the judge can; and in certain others, he cannot. Why can he not? Because, in Michigan, the supreme court says he cannot.

This suggests another corollary that may be introduced by an observation or two upon what Hilaire Belloc calls examples of contemporary stupidity. First, the stupidity of "following the single objective." "Human life," he says, "being a complex organic thing, and the end of man being happiness, contemporary stupidity loves to single out one objective and advance towards it without consideration of that instinctive balance between a thousand ends, of that natural coordination of innumerable objectives which the sane pursuit of happiness naturally demands. Thus, honor and chivalry handicap you in war; therefore, if you would win the war, sacrifice every consideration of honor and chivalry. Or, again, if speed be an advantage in travel, obtain it to the destruction of comfort; or, if comfort, obtain it to the destruction of speed. And so on through the whole series of possible asinities." And second, the stupidity of "the metrical negation of experience." "Take, for example, vital statistics. On the one side you have a hundred human beings full of vigor and aptitude, good singers, good builders, good fighters. Among them, five die of a particular disease in a given time, and the average length of life among them is fifty years. On the other side you have a hundred dull, unhappy people, whose buildings are an eyesore, whose speech is harsh, and whose song is worthless, whose presence on this earth is distasteful to all who meet them and, indeed, to themselves—but of these only four die of the disease in the same given time, while their expectation of life is far greater than that of the first. Contemporary stupidity will have the impudence to say that the second group are healthier than the first."

These observations suggest two other corollaries I would leave with you finally. One is the danger of spreading such programs as yours exclusively through institutions, especially institutions reaching a special class, for instance, schools, thus missing the pre-school child; or children's agencies, thus missing the children of the well-to-do. And, a second, the danger of imposing these programs from above by the authority of public or quasi public officials, thus missing the enlistment

of the enthusiasm of the whole army of private physicians and specialists.

And this brings me, at last, to the general conclusion. Carry your crusade for child health into the home, into all our homes. Then will result therefrom a wider practice of private child specialists, in the pre-school and school period, in the homes of those who have means; and a wider use by those lacking in means of freely provided health resources. It is a stupid following of the single objective, by the easy method, to shape our child health programs to the treatment of the child outside the home. It is a wise and forthright following of the rounded good of the child and the community, albeit a much harder method, to shape our health programs to the education and assistance of the mother to promote the health of her own child in her own home.

**THE WORKERS IN HEALTH EDUCATION—THE WORK THEY
SHOULD DO**

MRS. F. C. OSBOEN, President, Board of Education, Detroit, Mich., Presiding

Mrs. Osborn: As president of the Board of Education of the City of Detroit, I welcome this great gathering of health workers to our city. Your coming is a distinct advantage to us and I hope it may be of distinct advantage to you in more ways than merely pleasant association with one another.

We are carrying out a health program in the Detroit public schools on a broad scale, and we feel that equally broad health programs should be carried out in all the schools throughout the country, so that every child and every household may be reached by the health message. Definite health instruction is part of the everyday work of every public school in the city. The school buildings are planned and constructed to this purpose, with special regard for proper heating, ventilation, and lighting; gymnasium and playgrounds function efficiently to this end every hour of the day; lunch rooms and domestic science courses practice and preach proper nutrition. A dental department is maintained. Special rooms and special schools are provided for pathological cases. A director of health instruction supervises the work, assisted by a corps of trained health teachers directly in charge of gymnasium and playground activities. A system of health inspection of every child is in charge of a physician; this provides authentic information to parents for their guidance in health maintenance and disease prevention.

The department of statistics and research keeps careful measurements of height, weight and growth for comparison. The subnormal, physical and mental, including the blind, deaf, crippled, anemic, those of defective speech, the mentally backward, and the incorrigible, are placed in separate classes or schools and given the special attention they need. This allows the great body of normal children to progress unimpeded by these retarding elements. Slight physical defects are overcome by corrective measures. The Detroit Board of Education has been most fortunate in securing people peculiarly fitted to do this work, for example, Miss Perrin, until recently our director of health education, now loaned to the American Child Health Association. Dr. Palmer, now with your organization, was formerly connected with the Detroit Board of Health. Cooperation between the Board of Education and the Board of Health is very close in every way. The latter board conducts nutritional work with the children, and mothers' classes in a number of schools. The women's clubs cooperate in the distribution of milk, and in many other ways.

THE PHYSICIAN IN CHILD WELFARE AND IN HEALTH EDUCATION

JOHN M. DODSON, M.D., Dean of Rush Medical College, Chicago, Ill.

In the project of training and education for health, both of adults and children, many groups are interested—teachers, parents, nurses, social welfare workers, health officers, dentists, physicians and others. The service of all of these is invaluable. Moreover, the movement must enlist the activities of thousands of individuals. Any national organization can but outline principles and policies after careful study by those with expert knowledge. These principles and policies must be put into effect by large numbers scattered throughout the nation if the movement is to be effective.

One of the most essential functions of a central organization like the American Child Health Association is to mark out clearly, the scope and limits of each group, and then, to do all in its power to secure conformity from these several groups, both collectively and individually, with a definite plan; to bring about, in other words, their intelligent, sympathetic and cordial cooperation and effective coordination. It is not a proper function of such a central organization to undertake an activity for which one of the groups is especially fitted.

One of the most fundamental studies which such a central organization should undertake is that of the qualifications of the members of each group, and decision as to what phases of the welfare work should be undertaken by them. To arrive at sound conclusions in such a study, one must have:

First. Thorough knowledge of the qualifications of the members of a group, as determined by the course of study pursued in preparation for that particular vocation.

Second. One must know in what way and to what degree the group is organized, locally and nationally; that is, whether or not it is organized in such a way as to secure wide spread uniformity of action by its members in the thousands of communities in which they are distributed on any project which it is sought to advance.

With this basic idea in mind, one can appraise intelligently the place of the physician in the infant and child welfare movement, only by knowing the course of study demanded of the physician under present day conditions, for the practice of his profession. These requirements may be briefly stated as follows. For admission to any

recognized medical school there is demanded the completion of a four year high school course, plus a minimum of two years of pre-medical college work; in several schools the demand is now for three or four years. Moreover, this college work must include at least one year of college physics, two years of chemistry, and a year of biology, a reading knowledge of at least one modern language, other than English, and some knowledge of Latin. The remainder of the college work is made up of other branches. Having entered the medical school, the student is required to spend a minimum of four years, of nine months each, in the study of the medical branches, and in addition to this, several schools require, as a preliminary to graduation, at least one year of satisfactory service as an interne in an approved hospital; in several states, such a hospital year is a requisite for licensure. These requirements have been in effect, with the exception of the interne year, in many of the better schools for over twenty years—two-thirds of a generation. A large proportion of the physicians now in practice have pursued this course of study in preparation for their life work. In the amount of time required, and the severity of the training, the medical curriculum demands more than is required in preparation for any other vocation.

It cannot be asserted that the procedure is perfect. There are many defects and shortcomings which must be amended if the physician is to be equipped to render the largest possible service. Among the improvements which need to be made are:

First. More rigid care in the selection of students to be admitted, especially as to character and ideals.

Second. More stress to be laid on the training and development of the faculties than on the imparting of information; and to this end,

Third. More time to be devoted to first hand training in laboratory and the small group clinic and less to the didactic lecture and the display clinic.

Fourth and last, most important of all, much more attention must be paid to preventive, as distinguished from curative, medicine. This is especially true in relation to infant and child welfare where the possibilities in the preventive field are so great.

Granting these present shortcomings, the discipline to which the medical man of today has been subjected in preparation for his calling provides an equipment for many important phases of the work of health education which is not, and which cannot be, supplied by the preparation for any other calling. Others are to speak of the qualifi-

cations of the nurse, the teacher, the nutritionist. It need only be pointed out here that the training for each of these vocations prepares its votaries for other types of service. It does not prepare them to do the work of the physician in health education or elsewhere. With this in mind, the function of the physician in relation to human welfare at the earlier life periods may be discussed. The earliest periods of life are included in this discussion because the major part of the service needed for the promotion of health, from intra-uterine life onward, is education—first, of the mother; later, of the child.

THE PRENATAL PERIOD

Here the responsibility falls almost wholly upon the physician. While the very well-to-do patient may be able to afford a nurse during a considerable part of her pregnancy, and the very poor who are seen in dispensary or out patient practice may have the aid of the nurse, the social worker, or both, for the vast majority of patients of moderate means, the task of educating them to the importance of seeking early and repeated examination and advice, previous to child birth, and then of giving that advice and conducting the mother through her pregnancy, falls wholly upon the doctor.

THE BIRTH PERIOD

At the time of birth, again, no other person is qualified to render expert service excepting the physician. The skillful, properly trained nurse can render valuable aid, but she cannot replace the physician, nor take over his responsibilities. It is true that large numbers of women have only the services of the midwife or neighbor, and it will doubtless be a long time before it will be possible to provide for every woman the services of a competent obstetrician, but it is equally certain that the satisfactory solution of this problem can never come from the agency of the midwife or of the trained nurse. Unhappily, the obstetric training of many of the physicians of today has been so inadequate that the obstetric results are far from what they should be. This state of affairs is being remedied.

INFANCY AND THE PRE-SCHOOL AGE

From the time of birth throughout the pre-school age, the question of infant and child welfare is mainly a problem of education of the mother in the proper care of her child. Here, again, the main responsibility must rest with the physician, who brings to the problem

a breadth of knowledge and a degree of skill which can be acquired in no other way than by the preparation afforded by a complete course in medicine, including a hospital training. The nurse and the social service worker can render valuable aid under his supervision, and for certain phases of the work, are better equipped than is the physician himself. They cannot, however, be satisfactory substitutes for him.

With the people of any community educated to the importance of periodic health examinations for children, and with physicians trained in the proper conduct of such examinations, physical defects will, for the most part, be detected and corrected before children reach the school age.

THE SCHOOL AGE

With the arrival of children at the school age, the physician becomes concerned with the school life as well as the home life of the children in his community. The doctor who is to render adequate service to the children of the families in his clientele must be as much interested in, and familiar with, the conditions of their school life, as of their home life. He must know the sanitary and hygienic conditions of the schools which are attended by these children. He should have knowledge of the studies in which they are engaged, and all phases of school activities. If he is a wise physician, he will confer at intervals with the teachers of these children.

Some physicians can serve the community in a yet broader way. The physician, by virtue of his superior knowledge and training, is equipped to render valuable service as a member of a school board. To many of the problems which arise in connection with the conduct of the schools, he brings a superior knowledge and wisdom not possessed by non-medical members of the board. This fact has been quite widely recognized by both the medical profession and the public, and large numbers of medical men have served, and are serving, as members of school boards in the United States. While it should be the business of the public health officials to see that all school buildings are located and constructed in such a way as to afford the best possible sanitary and hygienic environment for school children, this has not always been the case. In very many places, particularly in rural communities, the sanitary condition of school buildings is little short of criminal. The physicians of such a community are better prepared than other individuals to notice these defects and to secure their correction.

PHYSICAL EXAMINATION OF PUPILS AND TEACHERS

In the matter of physical examination of pupils and teachers, which ought to be a legal requirement everywhere, the only satisfactory solution is the appointment for this function of properly trained school physicians. These need not be full time men, that is, physicians who are giving all of their time to this school work. While, in a large city, there should be a sufficient number of full time physicians to insure the proper administration of this work, there is much to be said in favor of having a large part of the examining work done by physicians who give part of their time to the practice of medicine in the usual sense. The delegation of the task of examining for physical defects, to school nurses, and especially to teachers, can never be a satisfactory substitute for the examination by a properly trained physician. It is probable that it will be sometime yet before many communities will be educated to the point of providing school physicians; meanwhile, such communities must get along as best they can with such service as can be given by the school nurse or the teacher. It should be kept in mind, however, clearly and constantly, that this is but a makeshift, and that satisfactory results in the matter of physical examination of pupils and teachers can be secured, only when this matter is placed in the hands of physicians who have supplemented the usual preparation for their professional work with special training for the work of the school physician.

There is a prevailing notion that the examination of the well child is a more simple matter than the examination of one who is sick. The fact is quite otherwise. To examine thoroughly and accurately an apparently healthy individual, either child or adult, and to discover the minor defects which are so common, or to be perfectly certain that none are present, requires a high degree of expertness and great care. To decide, in the case of a child with physical defects, just what should be done for those which are remediable, and to convince the parents of their duty in the matter, demands good judgment, tact, and persistence, in addition to professional skill.

RELATION TO DEPARTMENTS OF EDUCATION AND OF HEALTH

Concerning the relation of the school physician to the health department on the one hand, and the department of education on the other, there has been much difference of opinion which has oftentimes led to misunderstanding and friction which has been a reproach to

both the teaching and medical professions. What the best solution of this problem is, may differ in different communities, but it does seem as if there should be a ready solution of the matter which would be satisfactory to all concerned. Certain phases of the school physician's work of necessity bring him into relation with the health department of the community. He must report to the health officer, cases of contagious disease, and ought to cooperate with him in securing the rigid exclusion from school of children so afflicted, throughout the period during which they are a menace to others with whom they come in contact.

There are other phases of health work which are closely related to the schools. In the matter of his selection and appointment, it is fundamental that the physician should give evidence to some competent body through an examination, civil service or otherwise, that he possesses the medical education required for the service. His work is primarily medical work, and his fitness for it can only be determined through an examination conducted by medical men. On the other hand, once he is appointed, he becomes an integral part of the school system. His duties relate him intimately to the school superintendent and other officials. In the interest of harmony and resulting efficiency in the school program, he must conform to the rules and regulations laid down; if he fails to do so, the superintendent of schools must have the power to suspend, and, if necessary, discharge him. His report should be made in duplicate, a copy going to the superintendent of schools, and one covering at least certain phases of his work to the health department. Whatever may be the best plan (and this may be different in different communities), it is a reproach to both professions whenever satisfactory, harmonious relations fail to be established between the department of health on the one side and the school system on the other.

The physician's education does not equip him for the task of teaching the school child hygiene and allied subjects, and the effort to have these subjects taught by some physician in the community has almost always resulted in failure. It is of advantage, however, to have the teachers of hygiene and allied subjects in the schools instructed in normal schools or in colleges for teachers by persons who have had a full medical training wherever this is possible. There are relatively few instructors at the present time who have been thus prepared. Their number doubtless will increase as the value of their service is more keenly appreciated and such work more adequately compensated.

THE ORGANIZATIONS OF THE MEDICAL PROFESSION

In the promotion of great health movements, the groups concerned may be conveniently distinguished as of two types, (1) the Voluntary, Non-Professional Group, and (2) the Professional Group. By a voluntary group is meant such an organization as the American Child Health Association, composed of volunteer members brought together for a common object, in this case, for example, the promotion of infant and child welfare. Its membership includes persons engaged in a great variety of occupations, some of which are intimately related to child welfare, others are remotely so related, and others not at all. The uniting bond is a common purpose. Funds are made available from various sources, sometimes in generous amounts, for the accomplishment of the objects of the organization. It may have local, state, or community branches, or affiliated groups, but the number of its members is usually not so large as in a professional association. Its advantages are that, being a voluntary association, devoted to a specific movement, its members coming from many social and vocational groups, it cannot be suspected of any ulterior motives; its pronouncements, therefore, carry weight with the public.

The other type of organization is that made up of persons engaged in a particular occupation, such as teachers, nurses, dentists, physicians and the like. The primary bond of union is a desire to promote the work of that particular profession and to make the service of its members more effective and useful. At times such an association is at a decided disadvantage in an effort to promote the best interests of the public, however sincere and unselfish it may be. When, for example, an association of physicians expresses an opinion as to the need for universal vaccination, or for the use of animals in scientific research, or the value of periodic physical examination of the apparently healthy, its pronouncement is quite likely to be discounted by some persons who attribute to the authors an ulterior motive, namely, the desire to promote the selfish interests of the physician.

On the other hand, when there develops a movement which threatens the public welfare, such as legislation to restrict or abolish the use of animals in research, the ability of such a professional association (especially if the state and local branches are closely federated and in close touch with the headquarters of the national association) to secure the prompt action of a vast, widely distributed membership gives it a tremendous power.

THE AMERICAN MEDICAL ASSOCIATION

In its thorough organization the medical profession probably excels that of any other vocation. The reorganization of the medical profession, some twenty years ago, into a federated body, with the County Medical Society as a unit, this being represented in the State Medical Society by councillors elected for that purpose, while the State Societies in turn are represented by delegates to the National Organization, the number of these delegates being in ratio to the number of members of the association in the several states, is a very effective plan. At the headquarters of the Association in Chicago, an enormous mass of information has been gathered about physicians, both in and out of the organization; and the relations of the constituent groups have been perfected in a way which makes it possible to reach the individual members promptly and effectively. This was shown during the late war when there arose a sudden demand for an enormous number of physicians to serve as medical officers of a vast army of three or four millions of men. The Surgeon General found ready to his hand in the American Medical Association, means of appealing to the physicians of the country and of selecting those who were most fit and who could be best spared from their duties at home. Through this organization it is possible to extend a great national movement into each state, and, if necessary, to each county and city, to enlist the interest and activity of thousands of physicians, and to organize them for cooperative effort with other groups.

THE NATIONAL EDUCATION ASSOCIATION

Only one other organization has anything like so large a membership, and that is the National Education Association, which numbers now one hundred and forty thousand of the teachers of the country in its national organization. When the federation of this association is perfected on the same lines as those of the American Medical Association, its membership will reach or exceed a half million teachers, as nearly this number is included at the present time in the several State Teachers' Associations. The possibilities of results through the cooperation of such vast organizations as these are almost unlimited. Advised and assisted by voluntary organizations of special groups which can command the service of highly trained experts in educational and medical lines, such cooperative effort seems to offer the largest promise of putting over and carrying to a successful issue in

any large nation, a wide program for advance in the training and education of our youth for health and efficiency.

DISCUSSION

Dr. Joseph C. Palmer, Health Director, Department of Public Instruction, Syracuse: I was exceedingly interested in this paper and also in the phase of it in which Dr. Dodson spoke of the control of health work in public schools by the Boards of Health or by the Boards of Education.

I have had a peculiar experience in this connection, in that I served under the Board of Health for seven years, before taking up work in the Department of Education.

In 1914 a law was passed in New York State for second-class cities, which provided that the control of health work in public schools be transferred to the Board of Education. Perhaps for the control of contagious diseases, the work may be more efficiently carried on under the Board of Health; but I have been now for ten years under the Board of Education in Syracuse, and there is no comparison in the efficiency obtained. Our school nurses become health teachers, as perhaps you know, and we are regarded by teachers as part of the school system in getting correction of physical defects, i. e., for vision, for dental work, for adenoids and tonsils, correction of malnutrition, etc. All this is part of the educational system and things go very smoothly. We did our Schick work last year and had no trouble in gaining the cooperation of teachers and principals. We are now starting on goiter work, it being our intention to make a complete survey of goiter, small, medium and large, and to institute an educational campaign for its cure.

Mrs. E. R. Weeks, Kansas City: Dr. Dodson, in your directions for study by physicians, where comes the study for approach to mothers? Frequently this requires much more skill than does the approach to the child. The mother has to be convinced of the need, whereas the child knows its need. Where in all that plan for the education of the physician comes the training of a young man in the psychology of approach to parents?

Dr. Dodson: I think I should begin the answer to that by saying, "with his mother." If his home training is such as to make a decent, kindly gentleman of him, you need not worry much about his special psychological approach to mothers. I have made up my mind that you cannot teach ethics very effectively to a young man already twenty-three years old. You can show him methods and details of approach. I am frank to say that one of the things in medical administration that has to be kept constantly before the minds of some teachers, is that they are dealing with people and not cases; that sick people are human beings, and that everything one does or says that is not kind, is not only hurting the patient, but is setting a bad example to the students. I think we are improving in that regard. I think that the real solution of this problem, however, lies in the selection of the young men when they enter the medical school. They are too far along to do much with them—to make them gentlemen—after that, but the medical school can insist that they be high-minded, gentlemanly individuals, imbued with the spirit of service, as a *sine qua non* for admission to the medical profession.

health dispensary and must conduct its activities in close alignment with infant welfare and public health agencies. Indeed it must be converted into a child hygiene agency which will have a new concern for physical soundness and mental health. To realize this destiny, it must come more fully under medical and nursing influence.

In view of these possibilities, the new nursery school movement, both in England and in America, takes on considerable significance. The nursery school as a public hygiene agency has received the official sanction of Parliament through the Education Act of 1918. In our own country, it is altogether on a voluntary and pioneer basis. One of the most notable of all nursery schools is the Merrill-Palmer School of Detroit, which was established in 1921, and reflects the vision of its donor. This nursery is demonstrating the possibility of adapting medical and educational procedures more systematically to promote the development of children from two to six years of age and also to train the present and future parents of such children.

It is too early to assess the work and the significance of the nursery school and, at present, we may regard it sympathetically as a kind of third party movement through which the full responsibilities and opportunities of the American kindergarten will be made more clear. We do not so much need the nursery school as an additional and separate agency, but we may need it as a stimulus which will bring the kindergarten to a prompter realization of its functions in a program of pre-school hygiene.

3. PARENTS

Finally, the welfare of the pre-school child will be intimately dependent upon the character of his home and upon the intelligence of his parents. The administrative task of pre-school hygiene resolves itself largely into problems of parental guidance and pre-parental education.

From the broad standpoint of public policy, no more far-reaching measure in behalf of the children of the future can be instituted than a systematic and sincere type of pre-parental education. This education must be so conceived and so administered that it will reach the little mothers in the grammar grades and girls in high school, normal school, and college. It must reach also the boys.

By developing the possibilities of a periodical health service and by bringing it through the kindergarten, into living relations with our vast public school system, we shall be able to meet more completely the needs of the pre-school children of the future and of their parents.

teaching the children out of the life experiences in which they find themselves.

In time, our normal schools and colleges will meet our needs better along these lines, and will send us teachers who know more about health education in its various phases.

In the meantime, many teachers, because of their great personal interest, are concerning themselves joyously and seriously in the health of the children whom they are teaching. They are glad of all the scientific information that reaches them. They welcome suggestion concerning subject matter and method that they find in educational magazines. They are taking nutrition, biology, and mental hygiene courses. Some are busy with correspondence courses and many include health studies in their summer school work. Probably no one body of people is more actively and earnestly engaged in the study of health education for children than the teachers. Later, when all the school administrators believe more firmly in the value of teaching health in the schools, when the teachers are more thoroughly trained for the work, when more people understand better how children are taught, we shall look back at today and wonder that we found so many difficulties and thought so much more about ourselves and our opinions than about our children's needs.

That day, when the health program will be a part of all our school systems, is nearer because of the work of many eager teachers in our land, and many wise scientific people who are studying the subject matter, and are preparing it for our teachers to use. We teachers cannot wait to begin until all the subject matter is prepared to meet the new demand, but we must do the best we know, with what we now have and are steadily acquiring. We shall make many mistakes, even as others do in other walks of life, but a better day for the health of our school children will come sooner, because of the work of our teachers in many schools today.

AVAILABLE INFLUENCES

The various influences with which the grade teachers may work are the children, the parents, the school doctor and nurse, the school dentist, and the physical training teacher, and with the older children, the home economics and general science teachers. All of them are probably more united today on the subject of better health for children than ever before. Positive health ideas are strongly in evidence in the life of the children, and as our health education can be wrought into a more united whole, it will become increasingly valuable.

Dr. Decroly, the great Belgian educator, says that all our teaching

should be based on the needs of the children. This surely is a good starting place for our health education. We must meet the children in the midst of their own experiences or unfortunately most of our teaching is lost because it does not meet their needs. So many of us know so much more about health than we do. We would secure not knowledge alone for our children, but the formation of the right habits of living. Making the knowledge available when it is needed is a new incentive for more vital teaching.

We see, as needs for the best growth of our children, food, sleep, rest, good posture, cleanliness, proper clothing, and a good state of mind.

Many teachers are working in close cooperation with the home, and are trying in the schools to help meet these needs through the following activities: weighing and measuring regularly; teaching health habits; milk luncheons, from an educational as well as nutritional standpoint; active, sympathetic cooperation with the school doctor, nurse and dentist; the use of health subject matter in the traditional school subjects; representation through handwork of many health beliefs and efforts; plays and games for health value.

With the older children, the teaching of home making can be based on health and happiness, and a study of foods for health purposes adds greatly to the value of the experiment. General science teachers are also making a definite contribution to health teaching. We have all these influences to raise the general health standard for all the children in our schools.

In our city, in answer to a request from the teachers themselves, four special health classes have been formed for the underweight children. These children have privileges and special help from a doctor, a nurse and a teacher, all of whom are secured through the Christmas Seal Fund of the Tuberculosis League dispensed by our Welfare Bureau. They enter the class only by invitation after consultation with the parents. They are under the direction of the School Department. Physical training teachers with their corrective work, and hospital clinics furnish very definite help.

You will be interested to know that candy sales in our schools, even to raise money for pet projects, have been discontinued, because our teachers believe they could hardly teach one thing and do the other. One of our junior high school lunch rooms sells no candy or sweet chocolate. They sell fruit instead. One Parent-Teacher Association wished to have a candy sale. Because some of our teachers believed it would be inconsistent with our health program, it was given up.

New teachers coming into the city must have special help from the

physical training teacher, the home making teacher, and through a special health course provided by the School Department. Their interest is first secured by the measuring and weighing, and then grows as they learn to meet the needs of their children.

In any community, in the beginning of such work, a few teachers will be found willing to undertake the teaching of health. Gradually the interest spreads, and from teachers' thinking it an extra burden, one thing more to do, all real teachers are glad to do it because of the very evident benefit to the children.

In the question of conferences concerning individual children who need special help, we might ask, how will the teacher get the time? Time previously spent in keeping children after school as a punishment for restlessness and mischief, or for extra work, when a child is too tired to do any work at all, may well be spent in conferences with the child's mother as to his health habits, with the nurse as to his physical condition and what can be done about it; sometimes with a social worker as to remedies for discouraging home conditions. All this understanding of the child will help us better to fit his work to his ability and to find a way to remove some of the physical and social difficulties.

All our stupidities in health teaching may be stupidities in other subjects as well, so health teaching is not to be blamed for mistakes. It is only a little more prominent at the present time. It may be there are no more stupid blunders among teachers than among people administering health from different angles. In spite of mistakes, much excellent work is being done and many children are healthier and happier.

Although so many people know so many things, still it remains for the teachers to adapt knowledge to the needs of little children. This many are doing in teaching health and they are eager for a better knowledge of better things to do. It may be that we have not yet realized how important the grade teacher is in the great health program. Upon her sympathetic cooperation and enthusiastic response depends the success of the best of plans. Perfunctory acceptance of the best course of study, of the finest outlines, will result in failure. Teachers may not realize all they should do, all they may do, but many are working for the better health of all their children, and are seeking for greater knowledge that shall make them more effective.

The teacher may be looking for inspiration and leadership to her principal, to her superintendent, or to a health supervisor, but whether health is a dull task often to be ignored or avoided, or a possession much to be prized, depends upon the teacher. Let us pay to them the tribute which is their due.

THE NUTRITION SPECIALIST IN THE HEALTH PROGRAM

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Good nutrition is a fundamental requirement of good health. So dependent, indeed, is the health of an individual on the state of his nutrition that "good nutrition" and "good health," although the latter is, strictly speaking, more inclusive, have come to be used as almost synonymous terms. In view of this fact, it would seem an obvious conclusion that nutrition should occupy a big part of every health program, and that at least one person well trained in nutrition should be on the staff of every organization engaged in health work. It is true, indeed, that the problem of nutrition is now being generally recognized, and that schools, city, and state health departments, and various public and private organizations, are carrying on "nutrition programs." It is to be regretted that in too many cases this means nothing more than that the children have been weighed and measured, and the mid-morning lunch of milk introduced. Moreover, it would almost seem the exception rather than the rule to find a really well qualified nutrition person in charge of the work. There may, to be sure, be some one bearing the nutrition title, but inquiry too often reveals no real right to its use. The same organization which demands a high grade of professional training of its other workers—physicians, nurses, social workers, teachers—will often allow the nutrition work to be carried by a person with only a small amount of superficial training in nutrition, or none at all. The only explanation of this inconsistency appears to be the lack of a realization on the part of those in authority that nutrition, far from being a mere matter of weighing and milk drinking, is a whole special field in itself, and should be directed only by persons having a standing in their own profession at least equal to that demanded of other specialists in their respective fields.

It is the purpose of this paper to consider the place of a nutrition trained person in the health program, her duties, responsibilities, and preparation for her work. What she is called—nutrition specialist, nutrition worker, nutritionist, dietitian—is a matter of small concern, provided she has the training and the ability to handle the nutrition aspect of the work in a competent way. Since it is now generally agreed among specialists that the health program should center in the public school, I shall first outline what seems to be the logical relation of a nutrition specialist in connection with the school and then discuss further her qualifications and preparation.

The nutrition specialist seems to fit logically into the school sys-

tem in the same way as do the music, drawing, physical training and other specialists whose connection with the school is already established. In brief, this relation may be stated as follows: Each specialist is an authority in her own particular field. She organizes, outlines, and directs the work throughout the entire school and is to a certain degree held responsible for results. In the usual moderate sized school system most of the actual teaching of special subjects is done by the grade teachers. Each supervisor holds meetings with the teachers, outlines and explains the work, and gives suggestions as to methods of teaching. In addition, she visits the different grades at intervals of one or two weeks, assisting the teacher over hard places or teaching the lesson herself. In the upper grades where a more extended knowledge of subject matter or technique is required than the usual teacher may be expected to possess, and where most of the regular subjects are taught by the department method, the supervisor of a special subject usually does all the teaching. In a big city system the special subjects are handled in practically the same way, each specialist in this case being provided with a sufficient corps of assistants to cover the field.

In a similar manner, it appears to me, should the nutrition specialist function in the public school—not as an outsider whose services are being donated by some woman's club or other private organization, but as a regular member of the school staff. This means a definite allotment of time to her work and the assistance of the teachers in presenting the lessons in their respective grades. This shifting of the health instruction to the shoulders of the teachers is not done merely for the sake of economy, but for effectiveness of work. The teacher is as a rule better able to adapt the subject matter to her own group than is the specialist, and her daily contact with the children makes it possible to keep their interest continually renewed. Moreover, the success of the nutrition program, as of any other undertaking, depends to a considerable degree upon the interest and cooperation of the teachers. And teachers in common with other human beings, put forth their best efforts only when the responsibility is theirs.

DUTIES AND RESPONSIBILITIES

The duties and responsibilities of the nutrition person in the school health program may then be outlined somewhat as follows:

1. The nutrition specialist should organize, plan, and direct the work in nutrition for the entire school. She should outline it by grades and present it to the teachers with explanations as to its use in various rooms.
2. She should be responsible for furnishing authentic subject mat-

ter on the various lesson topics, the best method of doing this probably being by a series of nutrition lessons given to the teachers.

3. She should suggest projects and other methods of presenting subject matter, as well as incentives and devices effective with children of varying ages and interests. Such offerings should always be in the form of suggestions only, for it is essential to the success of the project that each teacher has unlimited opportunity for initiative in developing procedure in her own room.

4. She should give assistance to the teachers in the practical conduct of the work in whatever way best meets their individual need—it may be by giving regular or occasional lessons herself, or by merely keeping in touch with the work in an advisory capacity. Her attitude should never be that of an overseer, but rather that of an assistant, willing to help out on the problem in whatever way seems best.

5. She should present the nutrition project at parent-teacher's meetings, and should be ready as occasion offers to instruct mothers, individually, or in groups, in the requirements of an adequate diet and the general problems of child feeding, in simple, non-technical language.

6. She should be a recognized authority in her field, the one to whom all questions concerning food and nutrition may be referred by either teachers or parents with the assurance that the answers will be scientifically correct. This requires that she keep in touch with current literature and that she be willing frankly to say "I do not know. I will find out," whenever honesty demands it.

7. She should be ready if necessary to plan menus for the school lunch, and should in any case have sufficient direction of the lunch to insure its making a definite contribution to the health project.

8. She should devise and try out methods of evaluating the effectiveness of the health instruction and should present the findings of such studies to the school staff, and if expediency prompts it, to the school board, the parents, or to the children themselves.

9. She should work in close touch and harmony with the physician, the physical training teacher, the nurse, and all others having to do with the health program.

Such are the principal duties of the nutrition specialist in the health program of the public school. Their mere recital makes it apparent that one who assumes the title and with it these responsibilities requires thorough and specialized training for the work. The National Child Health Council has recently outlined the preparation which should be required of persons qualifying as nutrition specialists. This pro-

gram of training should be given wide circulation among people employing health workers and the requirements, as speedily as possible, demanded of all undertaking nutrition work. Some of the outstanding requirements may be emphasized in this connection.

OUTSTANDING REQUIREMENTS

A foundation in science is, of course, the prime requisite in nutrition work. Physiology—especially the physiology of digestion, absorption, assimilation, and the whole chain of nutritive processes—and the chemistry of food and nutrition are particularly necessary for the nutrition worker. In addition to these, she needs an up-to-date practical working knowledge of dietetics. She should know the needs of the body in respect to the various food elements, and how these needs may be supplied by the different foodstuffs. Without this detailed knowledge she must dogmatically follow a set diet without any variations, and will be totally unable to answer the flood of questions which are sure to come to her if a real interest is once created. With it she is able to adapt her dietary advice to suit the customs and the food supply of a locality or to the dietetic prejudices of the different racial groups, without in any way sacrificing the adequacy of the diet.

A knowledge of the principles of food preparation and of the problem of marketing will be valuable assets to a nutrition worker in any locality, and are almost essential in a school whose children come largely from the lower income groups; for the possibility of improving the nutrition of the children often depends on teaching the family how to spend the small amount allowed for food to better advantage, and to prepare the food in an appetizing way. In such localities social service training and experience are also decided advantages to the nutrition worker, if not actual necessities.

In addition to her scientific training, the nutrition specialist who expects to succeed in a public school (or elsewhere, for that matter) must have an understanding of psychology and of educational procedure. It is in this respect that many of the best prepared people from the scientific aspect so frequently fail completely. They know the subject matter, but they do not know how to adapt it, to make it attractive, to "get it across" to the children or their parents, as the case may be. And conversely, many of the people most successful in getting ideas across and arousing interest are frequently sadly lacking as regards scientific training. They are therefore prone to commit serious blunders which do much harm to the nutrition cause. It cannot be too strongly emphasized, therefore, that both the scientific training and the knowledge of educational psychology and method are essential in the training of those desiring to render public nutrition service.

THE NURSE

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The public health nurse exists for the assistance she can render in the promotion of health, the prevention of disease and the cure of existing disease. In her work it makes no difference whether her particular field of educational nursing is prenatal, infant, pre-school, school or adult hygiene, whether it is industrial, tuberculosis, venereal disease, other communicable diseases, mental hygiene, or a combination of all of these with bedside nursing—her *chief* function is to interpret to her people the scientific truths regarding health (not so interpreted by other workers), with such tact in approach and such skill in teaching that they not only understand but are eager or willing to act. Her function carries one step farther—to see that the people do act as comfortably and easily as possible; in other words, to see that her teaching is effective. The chief function of the public health nurse, then, is health education.

But health education is a tremendous term! May we define it—as education, formal or informal, that gives the individual the opportunity to reach best the maximum of his capacity because of the maximum efficiency of his physical being in which is embodied all that capacity. It includes education for mental health as for physical health, and thus implies the teaching of that discrimination in evaluation which would never mean health for health's sake, but always the highest possible degree of health for the individual for the sake of his fullest and most useful life. We like to think of "the body as the instrument through which the mind expresses itself," and health education is doubly significant in keeping the instrument in perfect tune and the player in perfect form.

Health education is an inclusive term. We think of it as embracing the early forming of health habits, the understanding of one's own equipment and development—mental and physical; the understanding of one's obligation to himself and to society for health; the understanding of protective health laws; and one's duty as a citizen—the understanding of one's obligation to the next generation. The

term "health education" applies quite as much to adult education as to that of children, but we shall omit adult education per se and consider it only with reference to the education of parents of children for the sake of the children. Even this would really take us into education for parenthood and education in infant hygiene, but because this is an American Child Health Association meeting and because the other speakers are physician, teacher and nutritionist, these remarks will be confined to health education as related to the two age groups where these three, as well as the dentist, the physical educator and the nurse, meet with common interest—the pre-school and the school groups. In the general scheme of education for health in these two groups, let us now try to place the nurse in the work for which she is most needed because of her special preparation and because no one else is covering it.

WITH THE DOCTOR

Outside the home, as a basis for the individual and family health work, the physician takes stock of the physical well being of the child periodically. He is too busy a man to do this more frequently than absolutely necessary, so his examination of each child, unless there is a special need, is at most once or twice a year. He finds conditions that need correcting and he wants his work to accomplish its purpose; he recommends habits to be broken or formed, corrections of defects to be made, treatments to be given—in other words, health education a-plenty to be launched and consummated. Now, who is to assist at the examinations, that the physician's time may be spared for the things he alone can do? Who is to scout for the "special needs" and call them to the attention of the physician? Who is to render the service more complete and more orderly by the keeping and filing of records? Who is to see that child and family understand the physician and follow his advice? By virtue of practice in clinic work as well as in gaining the confidence of children in unusual situations, the nurse can help both physician and child at the physical examinations. By virtue of three years, and sometimes many more, of careful watching of symptoms, the nurse should be sensitive to deviation from normal health and to danger from imminent or raging epidemics—hence she would seem the logical health scout for child and doctor to detect beginning defects or early signs of the all important communicable diseases. With the communicable diseases indeed the nurse acts as officer of the law in the protection as well as the education of her community. By virtue of

practice, special preparation and special interest, the nurse will usually be responsible for the health records. But most important of all, it seems to me, is the question of follow-up work. The physician is not carefully examining children either for practice or for a record of defects. The scientific findings of the doctor must be explained to the child's family and they persuaded or inspired to follow his recommendations. This means the revealing home visit where the rest of the child's tale is read, and often a carefully planned program of adult education in child health must follow. This visit requires pleasing personality, social insight, scientific knowledge, a capacity for informal teaching, and time. We have hoped, by special preparation, to evolve the combination of qualities necessary to meet these requirements in the person who has the foundation of scientific knowledge and experience with people—the public health nurse. Of course, if there is a nutritionist, the nurse would do none of the work in the special domain, unless requested to do so.

WITH SCHOOL AND HOME

Having taken stock of the physical assets and liabilities of each child, we wish to keep him at his highest health level. This means vigilance accompanied by education. The periodic examinations are supplemented by the monthly weight and measurement and due attention is paid to gain or loss. What person weighs or measures the child does not seem a matter of importance, provided that person is capable and accurate. The thing itself, however, is important, when accompanied by the teaching to the child and the child's family of the significance of normal growth and health. This again means careful follow-up work which, in general, I believe, is delegated to the nurse. Whatever cases the nutritionist might desire to follow would be exceptions to this generality.

The forming of health habits looms largest perhaps as the goal of health education in the earlier years. We do want the children to learn to live well. Here, family and teacher have the greatest opportunity because the children are with them every day. But it seems to me that doctor, dentist, nutritionist, physical educator and nurse should all be enlisted in the health habit crusade. The nurse can help the teacher with her interest, her enthusiasm and attractive material. She can talk occasionally to the children when special stimulation is needed, help with special contests or programs, plan group instruction for Parent-Teacher Association meetings, and help with school lunches.

Visits to the home will usually be needed to clinch the teaching. It is surely the part of the nurse to help in every way possible to make good health practices so gratifying and so regular a part of each child's daily life that the governing axones, dendrites and synapses will always be in readiness for response.

But we want "intelligently controlled habit," to use John Dewey's phrase. As soon and as rapidly as the children can understand why, we want them to *know* the why of health habits, and thus to establish the desired attitude of mind. At the beginning of this paper we included under the term "health education" the understanding of one's own equipment and development—mental and physical, the understanding of one's obligation to himself and to society for health, the understanding of protective health laws and one's duty as a citizen, and the understanding of one's obligation to the next generation. This means that for a complete program of health education in our schools, we must include in the curriculum for hygiene (personal, home, community), physiology, biology, civics, psychology, physical education, first aid and home care of the sick. In general, this is the realm of the teacher, educated in education, and may we add at this day, educated in health education? Is there any place here for the nurse? Certainly formal teaching is not her forte, and certainly she has an array of duties peculiarly her own. My own feeling would be that classroom teaching is best left to the classroom teacher. Classes in home nursing, where demonstration is so important, would seem to be the exception.

The nurse can point out the need of health education as outlined to parents, to teachers, to school boards, to the students themselves. She can sometimes aid the busy teachers by materials and suggestions for effective health teaching. She can help in the interpolation of health truths into lessons other than the ones mentioned, especially with the younger children. She can herself practice health and encourage the teachers to practice health that the teaching of the children may be more effective. Indeed, wherever there is a health need, wherever there is an opportunity to make more vital the principles for which she stands, there we should find the nurse.

**METHODS AND DEVICES FOR TEACHING HEALTH IN OUR
SCHOOLS**

Round Table Luncheon

**LUCY WOOD COLLIER, Pacific Coast Representative, American Child Health
Association, San Francisco, Cal., Presiding**

METHODS AND DEVICES FOR TEACHING HEALTH

DISCUSSION

Dr. Thomas D. Wood, New York City: I want to call your attention to the growth curve rather than the mere fact of weight or height. The child normally shows increase in weight. There should be no dropping down. It is an upward curve. The child is interested in it. The point is the increase in weight and height. The device we use as teachers in the classroom should put more emphasis on the records, on measurements, on effort and improvement, and not so much upon accidental conditions or mere accomplishments.

The second type of device is related to the first. I think we do not give enough attention to it yet as teachers, and that is, helping the pupil to interest himself or herself in his or her condition, realizing that nutrition has to do with the state of the tissues and attendance of health. A child, as a part of his health plan, should have the benefit of that device which we use in athletics, the being in condition, and keeping in training. I have a little student at present who was an Olympic champion, a girl now twenty, and she keeps in training all the time. She is imbued with the spirit and idea of being always in training. This splendid idea of development, of something beyond the mere fact of weighing so much and growing, can be adapted to children, but just how it can be adapted to children of all ages remains to be seen.

The third device relates itself to what has been suggested as the second purpose in education—training for citizenship, helping the child at each stage of development to appreciate his relation to the group. It means social organization. I believe that the little child, even, should have associated with the habits related to his own health, a thin wedge, gradually widening, of interest in and service to the health of the members of his group, in the home, in the school, in the community.

Mrs. Collier: Dr. Wood has stressed the very point that I want our next speaker, Miss Mabel C. Bragg, to bring out. We are all deeply interested in, and deeply hopeful of, new developments in the child health education field in which the research workers are at work. We all want these very exact and fine scientific facts, but the day will never come when we can let the giving forth of facts take the place of the devices and the methods so called for keeping up the spirit of "health first" in our schools. I want to call upon Miss Bragg to give us just a few words on this subject.

Miss Mabel Bragg, Newtonville, Mass.: I have been not a little interested in the results of our weighing this fall with the new score cards, and I asked Dr. Wood yesterday, whether they ought to be so much better than they were last fall. As it is, they seem so much better that I do not quite dare to tell yet what they are. I found myself afraid that we might have made some mistakes in our estimating, and should have to go over them again to be quite sure. I should love to share with you the sense of joyous accomplishment that came to us in the work of our children when we saw these figures for the first time. We have been trying to compare our September weights for the last four years to see what has happened to our children. We watched that curve as it was being made, but now, one of the most important things that we are working on is the marked gain the children have

made this fall. Not the fact, but the delight of the child in the fact, is the thing that we are stressing. All the things that we know are not going to do these children much good unless they can be made a permanent possession of the children and that same kind of joyous delight in the accomplishment can be made the personal possession of the teachers. It takes faith, attention, and a wonderful willing service; it takes much more than just statistical facts to make a real health worker.

Mrs. Collier: Miss Bragg has given us one of the answers to Dr. Emerson's challenge of yesterday. He said we were leaving out the home, and the parent, Miss Bragg does not think so, nor do the rest of us. When we grip the child, we grip the home, but in looking at our school health program from all angles, we must give a very large place to methods and devices for enlisting the cooperation of our community in the school health work. We need to do this in order to stimulate the work of the teacher, and to put the community squarely back of her. I want to call on one now, whose native endowment of human sympathy and understanding has been strengthened by a very remarkable experience throughout the country with mothers, educators, and the so-called public. I want to call upon Miss Jean to give us just a few words on how to grip our community so that it will stand squarely back of the school.

Miss Sally Lucas Jean, American Child Health Association, New York City: The advertiser has taught us how to reach into people's hearts and consciences, and make them put their hands into their pockets and pay the bill. We might glean something from the methods of the advertiser and also from those adopted in campaigns for health and education throughout the country. We know we can only go as far as the man in the street and the woman in the home will let us go with any plan we may have, and so we must reach the man in the street and then the woman in her home, then the teacher in the class room in order to reach these children in whom we are so much interested.

To do these things, we occasionally use methods which we, ourselves, may sometime deprecate. Does it seem undignified to cater to the ideas, to the whims, to the fancies of human nature? The clown, the fairy, and other dramatic characters have been successful in reaching certain types of people. We know that the day of the clown is past but we know also that it served its purpose. We also know that we are much further along the road today and that we can reach our community by a different method, more sure of results, than when, with faltering footsteps, we launched the idea that dramatic characters could arouse interest in an ideal of health.

Where are we today? How can we reach our people today? What do we want to do with the people, the man of the street, and the woman in her home? We want to make them feel that health is the most vital matter in the world; that nothing matters so much as the health of children. The whole world has set this as an ideal, but how to reach it is the question.

Consider the boy or girl in the classroom as Miss Bragg described them this morning, and the message they carry home of an increased interest in the commonplace matter of drinking milk, of going to bed early, of eating green vegetables! The mother or father finds that Elizabeth of fourteen is really interested for the first time in an early hour for bed when she has heretofore always begged for an extra half hour to stay up. The whole family is interested in the fact that their Elizabeth has come home with something practically helpful from school and an

impression has been made upon the home through the actual classroom work of the teacher. Billie, who does not like spinach, and says it is not good stuff, suddenly has a change of heart. He says, "Say, Mother, why don't you have some more of that green stuff?"—he who never wanted to eat the "green stuff" and scorned spinach. Thus a new idea planted has germinated.

Mr. Hoover and Dr. Vincent last night gave us a practical and very definite message. They suggested that with our idealism, we must have our feet very firmly planted on the ground.

We must have our ideals, but we must be sure that we are practical in our dreams. We can only be sure we are practical if we are getting results. Are we getting all the results that are possible? We do not know whether or not the work in the schools in the last few years has really been successful. But we do know this. We did not get results in the past according to the older methods used in the years which have gone. We did not succeed in making healthy human beings of our people, though we taught some of the science which was available.

We know that if you go into a classroom where health is really being taught in the schools, where teachers are really imbued with the spirit of health themselves, where they are really making it understood that it is a priceless possession, we find at once a different look in the children's faces. We find a different attitude towards the very simple laws of health. That seems a proof of the kind you would like to have, as good as any measuring stick form which can be put into figures. It is something which can be understood by anyone. There is no better way of carrying home the value of such work to the voter, to the mother and the father, to the people who make our laws, than to have healthy children who carry home from school an enthusiasm, and faith and a belief in health itself.

Mrs. Collier: I know that those of you who have worked in the classroom with the teacher have been struck by the teacher's hunger for appreciation. I think that the weakest point in our system of pedagogy now is that there is no way for the teacher to have a comeback on the fine original work that she does. Fortunately, where we can have health teaching stimulation in the school, we have an opportunity to give the teacher this appreciation which, as a human being, she needs. I would like to call now on Miss Brown to tell us of a device that she has worked out and is working out now at Fargo to further tie the home with the school work.

Miss Maud Brown, Child Health Demonstration, Fargo, N. D.: Just a word to express, if I can, the reason why I believe in the use of devices. The essentials that we are to teach are so few, and so axiomatic, that after they are once or twice repeated to the child, they may fall on deaf ears before the habit is formed. The device and the method are essential to bridge over that gap so as to vary the presentation of these facts, to keep the interest of the child alive until the simple health essential has sunken so deeply into his mind, down to the subconscious levels where he lives, that he finally automatically responds to a situation with a healthful reaction. There is a great danger of interest in the device taking the place of interest in the subject matter. For this reason I believe that all possible devices that we select should be the simplest. Mrs. Collier has asked several of us to talk very briefly on our pet device.

Now I haven't any pet device, but I should like to say just a word about one very simple plan which I have found has the greatest punch and therefore is the

more heavily laden with T. N. T. if wrongly used, the use of red, white and blue cards in reporting the weights to the homes. In the school systems where I have been an integral part of health education, I have not known of abuse of these plans nor of abuse of weighing and measuring children as an educational proposition. It is so easy to safeguard the thing, but unsafeguarded, it is really loaded with two serious dangers. The first is in the giving of cards of two colors for the underweight children. Usually, I believe the children who are ten per cent below average weight get a red card, while the children who are between ten per cent below and average get a blue card. Now, there is danger that the children who are just above the red card level may be going home with a false feeling of security, thinking that because they are not actually "red cards," they are all right. That is the first danger that I see. It is very easily safeguarded, because the teachers can readily point out the fact that there are many children who are less underweight than ten per cent who are in just as bad condition.

The other danger I believe perhaps is a fundamental fault. If it is, it will have to be eliminated. I am trying right now to work out a plan for eliminating that serious danger which is an integral part of the whole plan of measuring and weighing, which is only emphasized by the reporting on the red card. I am trying to work out a plan to keep the punch that the red card gives and yet not do a serious injustice to the poor youngster who is initially so handicapped that he never can come up to weight. I have spent the last two years trying, among other things, to find out whether there are such children or not, and I believe there are a good many of them. If we are forced to believe that a great deal of damage to child health has been done before we get them in school and that they are initially so handicapped that these poor red card youngsters cannot come up to weight, no matter how faithfully they carry out the program, then it has got to be eliminated, that is all. That is the reason I am glad to talk here in this family gathering because I wish every one of you in your different communities would try out various ways of managing it and let's all correspond and see if, among us, we cannot work out some way of keeping the good points and eliminating the danger. I see one way of eliminating the danger of satisfaction with an intermediate degree of underweight by giving one color for all underweight children; then as the second and the third monthly weighings show failure to gain, perhaps give the red cards to those that do not make a gain. That is only one direction in which I see a possibility of working the thing out. Probably some of you see a much more logical and better way. Let us try out different corrections, but let us not let go of something that is fundamentally sound just because unwise use of it in one certain direction has brought unfavorable results.

Mrs. Collier: One of the best safeguards we have in the classroom against falling in love with one special device and losing sight of the big end of our teaching is the special teacher in the school. To the direction of health education in a big school system, the special teachers are simply worth their weight in gold. The health director is conspiring all the time against the special teacher to see how she can steal her time and enthusiasm to further her health teaching program. Now I would like to call on Miss Perrin to tell us how the educational teacher can bring stimulation to the health teaching work of the classroom.

Miss Ethel Perrin, American Child Health Association, New York: It is agreed that the room teacher is the logical person to do the lion's share of health

teaching, but all special teachers have a contribution to make and the Physical Education Department can be a large contributor because of the wide approach to health through natural desires. Dr. Wood has already referred to this approach. Children are naturally interested in the big activity program and if the desire is sufficient, they will do anything to help. The athletic coach has demonstrated this to us but, as usual, we begin at the wrong end, from the university down through the high school to the elementary school. The difficulty is that the coach works with a small selected group, he carries his efforts over a small part of the year, and his one aim is to make people able to win something. However, can we not use that big interest that he has worked out successfully and give the children a higher aim? It is the duty of the physical education teacher to carry this idea to the room teacher. In the first place, the room teacher must realize the vital importance of exercise in the children's lives. The physical education teacher must make that exercise of the right sort. If it is the stereotyped one, two, three, four, it is very difficult to make a child see why he should obey all the health rules in order to be able to stretch his arms up straight over his head, but if he sees that he can compete with his associates more successfully and with greater happiness if he will follow out these health rules, then the physical education teacher can be of real value to the room teacher who is looking for just such motives for her health teaching. Without an understanding and appreciation of the play spirit, the room teacher has little chance of using this golden opportunity and it is the further duty of the physical education teacher to develop this play spirit when a teacher is so unfortunate as to be without it.

Mrs. Collier: Fortunately, the educational director does not have to give up plotting with the educational department when the school closes in June, because in more and more communities today, we have the summer playground and the health education director can follow this poor physical education teacher right on to the playground. I want to call on Miss Harris to tell what we can do in the playground to keep our children gaining in the summer. Every school in the country finds that when the children come back in the fall, they have lost weight.

Miss Cara Harris, Child Health Demonstration, Butherford Co., Tenn.: The responsibility of keeping children from losing weight during the summer time is a difficult problem to turn over to the playground director to solve. Our playgrounds in Fargo were in two beautiful parks, where nature had been unstinting in providing the most delightful surroundings. In order to establish group interest at the playgrounds we had a daily assembly at 2:30 o'clock which was the beginning time of the afternoon play program. The playgrounds were open during the morning, but as the groups were much smaller than in the afternoon, it was advisable to have the assemblies in the afternoon. Patriotic songs, flag salute, health and nature stories and songs, reports of hikes and exhibits of discoveries, silence game and simple demonstration of suitable activities with special features constituted the daily assembly.

Our general plan in Fargo included weighing every two weeks in order that each child's interest might be aroused. My experience with this playground work indicates that the attendance of children changes very rapidly so that you cannot count on the same children over a long period of time during the summer season. Thus the weighing and measuring serves largely as a means of interesting the individual child in his particular case, rather than furnishing accurate information as to actual results accomplished.

We found in our experience with the older boys particularly that rest was a difficult thing to secure as they come with the idea that they are going to play and play to the limit. It requires considerable ingenuity to work into the plan frequent cessation from intense activity. A child cannot enter half-heartedly into anything when it is healthy. Enforcing proper rest periods was our most difficult problem. We tried various schemes and finally found one which gained the respect of all groups after some persistency on our part. We instituted what we called the silence game, which really turned out to be a giggling game for the first few days. We began with two minutes and gradually increased to five minutes. All the children lay prone on the grass, which was absolutely dry, until the whistle was blown. In order to stimulate group competition, we interested the boys and girls in painting white oilcloth pennants with the word "silence." This pennant was posted in front of each winning group. You would certainly have enjoyed seeing the look on Jimmy's face when there was no pennant in front of his group—the trick worked. We asked Dr. Evans of the demonstration to talk to the boys on what it means to get ready to be a real baseball player; incidentally he talked about the value and importance of frequent periods of rest. I happened to be within ear shot of the baseball game a few days later when I heard the captain saying, "If you just had sense enough to take a little rest, you could make some showing on this team." We felt we were making progress after this. We knew we should defeat our purpose if we sent overtired children home from the playground in the afternoon.

We served milk in the middle of the afternoon, as had been the custom in the schools for the past two years. We were able to secure it at the same price and handle it in the same manner. One instance in connection with milk drinking I think will be interesting to you. There was a boy about thirteen years of age visiting relatives in Fargo who was a regular attendant at the playground during his two weeks' visit. I had not been very much impressed with the lad but got an entirely new feeling about him after the following outburst, "I don't see why they can't have enough milk for me to get mine. I buy four bottles every day." I discovered that he was buying a dime's worth every day and "setting up" three other fellows. I am satisfied the dime would have bought Coco-Cola and candy if the boy had not acquired the milk habit. The children all had the opportunity to participate in the milk products parade requested by the Commercial Club during Dairy Week.

We had an excellent opportunity to work out some good health ideas in our picnics. The description of one will give an example of how we did this. The children were led to suggest and decide what they would consider the right thing for a midafternoon picnic. They finally decided to have peanut butter sandwiches with lemonade. This included both fruit and vegetables, which met their idea of health giving foods. We secured some boxes of crackers, peanut butter, contributions of lettuce, lemons and sugar and the children worked in groups under a leader to get things ready for luncheon. We all decided that it would be very desirable to have the nurse come out to join us armed with Ivory soap, paper towels and nail brushes to help put over a genuine hand cleaning campaign. The boys heated the water on the picnic grate. Sixty pairs of immaculate hands were presented to participate in the different tasks assigned. There was no difference between the enthusiasm of the girls and that of the boys; the only trouble was that the jobs of getting the peanut butter ready by adding water to it, spreading it on crackers, cutting lettuce

leaves the right size, cutting and squeezing the lemons and making the lemonade would hardly hold out to keep everybody busy. If I had not had unbounded experience with children in large groups working jobs I think we should have been stampeded. The picnic was pronounced a complete success by those participating in it.

Mrs. Collier: I cannot resist mentioning to you at this time a device worked out by a very scheming health director, Mrs. Mary I. Preston, to tie up her work with the department of physical education in the San Francisco State Normal School. They have the Decathlon system in the training school for the children; that is, a course of ten weeks in physical education, on ten definite activities, followed by a competitive "event." So ten points were worked out that represented various health habits and the children were to work for them over a period of ten weeks. This record became very popular in the school. It was called "My Machine Record" and was carried out by the children from the sixth to the eighth grade, capitalizing the American child's knowledge of the automobile. Each child was asked to bring a picture of his or her favorite automobile. These automobiles could be placed above the blackboard in the order of the Health Habit score of the owner. In other words, if a Cadillac or Pierce Arrow owner had a very bad record, they would go down to the very bottom of the line.

My Machine Record

1. Kept spark plugs scrupulously clean.
2. Removed dirt from carburetor.
3. Gave machine four gallons of water.
4. Put no tea or coffee in gasoline tank.
5. Put in oil (fruit and vegetables) to keep it running smoothly.
6. Straightened up any sagging part as it interfered with good work—posture.
7. Gave headlights good treatment—eyes.
8. Provided a cheerful drive.
9. Exercised two hours to get a bigger and more powerful machine.
10. Took nine hours' sleep to clean and repair machine.

Machine Improvements

Repaired search lights—bought glasses.

Removed dangerous parts—tonsils.

Repaired bad spots—teeth.

So, you see, there are many devices with which to intrigue the physical education department into teaching health.

I cannot resist having a word said about the kindergarten, because it is in the kindergarten that we lay the foundation for all our health work, and through the kindergarten we touch the first and second grades very intimately, because in most of our schools the children in the first and second grades go back into the kindergarten in the afternoon to have their hand work. I would like a few words from Miss Abbot on the kindergarten.

Julia Wade Abbot, American Child Health Association, New York: My favorite machine is the Runabout! The Runabout or the Pre-School Child is receiving a great deal of attention these days. Child training and child care are being discussed from every angle. Child training or health education in its early stages should be largely an unconscious response on the part of the child to the right kind of environment. Because the response of the child is secured in this way, it is

doubly important that the mother and teacher should consciously provide the right kind of stimulus. They, themselves, are an important part of the child's environment. Children quickly reflect the interests and attitudes of the people about them. A teacher naturally emphasizes what she is most interested in. This is particularly true in the kindergarten, which employs no text books and which has a flexible curriculum. A flexible curriculum is an advantage, but it may also be a disadvantage. In teaching, and in teaching young children particularly, we should remember that the art of teaching is—the art of emphasis. Sometimes through a negative kind of emphasis, we make very undesirable habits interesting. For example: Bobby had been brought up in the right way. He liked milk and he drank it as a matter of course. One morning he astonished his mother by begging her to put in his milk just a few drops of coffee. His mother said, "Bobby, what is the matter with you. You have never wanted coffee before!" "Well, Mother," said Bobby, "I want to see the face my teacher makes up tomorrow morning when I tell her I've drunk coffee!"

When children live day by day in the right kind of a home or school they often make certain generalizations themselves, which give a splendid basis for learning facts about health. In one kindergarten there was an extra supply of milk for luncheon, because it was a rainy day. Mary said to the teacher, "We've got some milk left over." As the teacher was talking to a visitor, she said in an offhand way, "You can give it to the ones who need it, Mary." After a little while Mary came back and said, "I did it. I 'giv' it to all the skinny ones."

Some little girls were making furniture for a doll house. The doll house was very small and the dolls were many. One child said, "We have got to put two dolls into one bed." But Lena demurred. "No, we won't. We will make two beds because if they sleep together they'll snore the breath in each other's faces!"

In another school, the children had been on an excursion to the bakery shop. When they came back to the kindergarten and were reproducing the store, they conscientiously wrapped every little clay loaf of bread in waxed paper. They had discussed with the teacher why this was done in clean bakeries, and they saw no incongruity in following the same laws of hygiene even with play materials. In the same school the children were building a community with blocks. They had made houses, a school house, a fire engine house and a church. They had only a few blocks left and they decided to use these for a store. One child said, "This is going to be 'The Five and Ten.'" Another said, "No, it's going to be a candy store." But the question was decided by George, who said decisively, "No, it's not, it's going to be a grocery store. People can get along without candy, but they can't get along without groceries."

These stories illustrate how naturally children learn facts about health through the activities of the kindergarten. It is the beginning of the application of that sound principle of health education that health should be taught through all the subjects of the curriculum.

Mrs. Collier: On the table at the doorway, there is a small selection of health books. The classroom health book from the kindergarten through the eighth grade is a very helpful device for correlating health teaching with the regular school work. The books gathered together here show how we can correlate our health teaching with geography, science, reading, arithmetic or composition work, and with all the hand work of the little children. These books were gathered from schools in California in the course of my work throughout the state.

**THE MANHATTAN HEALTH SOCIETY—A DEMONSTRATION
IN COOPERATIVE HEALTH SERVICE FOR PEOPLE OF
MODERATE INCOME**

Round Table Luncheon

**MRS. OLIVE B. HUSK, Director, Manhattan Health Society, New York City,
Presiding**

Mrs. Husk: You have been hearing a great deal about the many demonstrations that are going on in different parts of the country. There is one that you have not heard about. It is different in its purpose from other demonstrations inasmuch as it is an experiment of pioneer significance, aiming to provide adequate health supervision for people of moderate incomes and also to prove whether or not a given community will support its own health work.

THE MANHATTAN HEALTH SOCIETY

A Demonstration in Self-Support of a Community Health Service

MRS. OLIVE B. HUSK, Director, Manhattan Health Society, New York

In an uptown section of New York known as Washington Heights, a certain modern business block houses, among its other communal interests, a steadily growing cooperative association known as the Manhattan Health Society—an experiment of pioneer significance in the development of a public health service. Although only sixteen months old, it is already claiming a definite place in the community's activities.

The Society had its inception some three years or more ago when the Maternity Center Association of New York began to discuss the possibility and feasibility of self-support for its own work. Late in 1920, their discussions led to the appointment of a committee of investigation, and interest was intensified by a gift of \$10,000 from an "anonymous donor" to aid the committee in studying similar experiments that might have been made elsewhere; to secure the ideas, opinions, and judgment of persons and organizations dealing with health problems; and, if necessary, to aid in the organization of some form of self-support in some given community. In January, 1921, the original committee was enlarged, and as constituted represented the Boards of Directors and Executive Staffs of the Maternity Center Association, New York Diet Kitchen Association, Henry Street Visiting Nurse Service, and certain persons of recognized standing in public health work. It thus became an independent group known as the "Committee to Study Community Organization for Self-Support of Health Protection for Mothers and Young Children."

For a number of months, this group gave serious consideration to two questions—namely, the practicability and timeliness of an experiment designed to prove whether or not the support of a given community could be obtained for health protection of mothers and young children within its area; and what the cost of such service would be to the community.

The need of such a demonstration had been especially impressed upon the members of the committee during the previous year by the extreme difficulty in raising adequate budgets for practically all philanthropically supported enterprises, while at the same time, popular demand for various kinds of health protection rapidly increased.

From a public health standpoint it is important that health protection should be extended to that great part of the population of limited but self-supporting incomes for whom little has been done. The committee believed it might be possible to further both ends more or less effectively through a self-support program, before it would be possible through appropriations from public funds.

It seemed not unreasonable to believe that people would learn, through their own management of a self-support enterprise, practical lessons essential to the successful transfer of all such measures from private to public control: first, the necessary amount and standard and cost of any health service; and second, that when transferred to public control assurance of adequate appropriations and qualified workers would rest on them as voters. Further, the committee believed such work to be a community responsibility and one that should be borne collectively.

Because the medical profession is not yet in full accord with group practice of medicine, the committee proposed to begin with the protective work of physicians in its clinics, and public health nursing care, but looked forward to the time when both the doctors and the citizens would agree that an organization for complete medical and nursing care is indispensable.

The project, as finally outlined by the committee, included, as participating agencies, the Maternity Center Association which had demonstrated by its own work the value of prenatal supervision and adequate maternity care; the New York Diet Kitchen Association, an organization of distinguished service which had its beginning fifty years ago in diet kitchens, and from which has evolved a group of health centers providing health supervision for mothers, babies and children of pre-school age; and the Henry Street Visiting Nurse Service, of recognized standard in public health service.

The services offered were maternity, infant and pre-school clinics with salaried physicians and nurses in attendance; follow-up home visits by the nurses and qualified nutrition workers; visiting nurse care for persons of all ages who are sick in their homes; and nursing care in confinement. The organization proposed to be a democratically organized self-supporting society designed to express community responsibility for, and cooperation in, health protection.

Geographically, the service was to be extended to all persons living within certain sanitary areas (the unit for recording vital statistics in New York); eligibility was to extend to all persons on a per capita cost of service, responsibility for extending membership was to

be borne largely by the members. If necessary, a subsidy should be granted to cover the organization period.

Suggested as adjuncts to the clinics and nursing service were mothers' clubs and a cooperative store providing materials, patterns and finished garments for pregnant mothers, infants and children, and utensils and supplies needed in times of sickness.

The purpose of the committee, as it was formulated, and its tentative plans, were indorsed by the Boards of Directors of the three associations concerned, and the individual members of the committee, the Chief of the Division of Child Hygiene of the New York City Department of Health, and the Babies' Welfare Federation of New York City.

By July, 1921, the committee was agreed that the experiment should be undertaken as a local community service within a limited district, this district to be selected on the basis of a more or less stationary population with its citizenship largely self-supporting, and with birth, death and sickness rates conforming closely to the general averages. Several sections of New York City were considered, and the one finally chosen in the Manhattanville section seemed to meet all of the qualifications, with the seemingly additional advantage of already having established under one roof the three organizations concerned.

COST OF SERVICE

The estimated cost of service for a membership of 5,000 members was \$6.00 per year per person. This estimate was based on the actual cost of the 1920 operating expenses of the three associations concerned, and upon sickness statistics of a population of 5,000. The method of payment for service was to be through individual memberships at \$6.00 a year, payable in advance, concessions of a monthly or quarterly rate to be made to those who would find it difficult to meet the full yearly dues at one time. It was further recommended that a family membership be worked out after actual experience in cost and amount of service.

In presenting the project to the chosen district, the approach was made through the local Chamber of Commerce, the local Woman's Club, the schools, churches and all known social and civic groups, from which a temporary Citizens' Committee was recruited. By January, 1922, this Committee, numbering sixty members and representing all community interests, came together and elected their temporary officers and accepted the project as outlined to them and as providing great elasticity. While agreeing, if necessary, to finance the proposed So-

ciety through its organization period, the Committee on Community Organization had no desire to dictate or participate in the deliberations of the Citizens' Committee.

On May 1, 1922, as the result of a decision of the Citizens' Committee to organize and conduct its affairs from its own Health Center, a store room was rented approximately in the center of the selected area, to be used both as office and Health Center. On June 15, 1922, the Manhattan Health Society began to function.

For its members, and as required, the Society purchased from the three participating associations the professional services of physicians and nurses, on the basis of an hourly fee for the physicians, and the regular monthly salary rate for nurses—both doctors and nurses being assigned from the regular staffs of the associations they represented. Special arrangements were made with Henry Street for night delivery service and Sunday care on a cost per visit basis.

From the inauguration of the service on June 15, 1922, the enrollment of members has steadily but slowly increased through the medium of satisfied members rather than through any special publicity effort.

Almost from the beginning, interest was indicated from a section where no propaganda effort had been extended and the continued applications for service brought forth the decision to disregard the original boundaries and give it, so far as possible, to the people who were applying for it. Later on, in response to the increasing demand for service which continued to come from this section, the Citizens' Committee in the original district consented to amalgamate their interest with those of the upper district, recognizing that the popular demand for the service and the better economic conditions of the district whence the demand was coming would be a hastening agent toward self-support.

On May 1, 1923, the Center was moved to 502 West 163rd Street. Later, a reorganization was effected and new officers elected. The faith of the anonymous donor who has made the Manhattan Health Society possible, was shown in a second gift of \$12,000 to carry the Society through 1923, and later, by assurance of help to meet deficits of 1924. Up to the present time, all expenses have been met by the subsidy, and the membership fees allowed to accumulate as a reserve fund, still untouched, but to be included in a budget for 1924 which is to be on a basis of an increasing fee account and a decreasing subsidy. At the end of four months of service, September 1, 1922, the fees received amounted to 4.5 per cent of the cost of service given; by September 1, 1923, the monthly intake had climbed to 25 per cent of the current cost.

The Society has encountered the usual vicissitudes to be expected in the growth of a cooperative organization. With the exception of the medical society at The Hague, which is established on a membership of 70,000 with weekly dues and with a professional service for complete medical clinics, emergency hospital service and drug supplies, and a cooperative students' society at the University of California, which also provides a complete medical service and sickness care for \$6.00 a year, there are no precedents for such a health service. Practically all mutual benefit societies provide monetary benefits rather than medical and nursing care service. The essential difference between the foregoing and the Manhattan plan with its many possibilities of health education, is that it tends to reduce sickness and thus lower the cost of service.

On October 15, 1923, there were 445 paid up members entitled to the service of the Society; 72 expectant mothers, 340 babies and 53 children of pre-school age have had the advantage of the advisory conferences of physicians and nurses; 803 visits to homes have been made to give nursing care to members who were under the care of their family physician. More than seventy physicians have given their approval of the service which the Society provides for them and their patients.

The Society's cooperative store is organized and functioning.

Further than these accomplishments, the spirit of cooperation is percolating through the community, and families from varied economic and social levels are actually becoming partners in the business of providing for themselves and their neighbors a community health service of the highest standard. Over on Long Island, in a section of greater New York, a reflection of the Manhattan Health Society is found in the Jackson Heights Health Association, which, on a limited scale, is opening a cooperative Health Center this month. In a year or two, deductions from the Manhattan demonstration, beginning in a section where cooperation and community spirit were almost nil, and now presenting the example of a community 100 per cent organized, getting solidly behind its Health Center from its inception, should provide interesting data for any city or town interested in a "self-supporting" health service.

The little group of pioneers working for and with this demonstration of self-support for a community health service are not prophets, but they are exceedingly optimistic, and their optimism is based on the appreciation, enthusiasm and cooperation of the members of the Manhattan Health Society.

October 15, 1923

Number of memberships issued.....	482
Number of members entitled to service.....	445
Amount of fees received (six families included)	\$2,100.88
Cost of Service.....	\$14,980.92
Additional Expenses:	
Publicity	\$1,678.26
Organization	876.05
Equipment	651.67
Grand Total	\$18,186.90

Case A

Family income \$125 per week.

Father and mother American born and of Canadian parentage. Intelligent. and of average education. Mother, before marriage, private secretary to head of large corporation. Married young and admittedly without the realization of the responsibilities before her.

Mother attracted to the Health Center by window display of posters and baby clothes.

Came to the Center to inquire about the service for the baby. Greatly worried over proper feeding and acknowledged ignorance as to the right sort of care the baby should have. Took out membership for baby and became regular attendant at doctor's conferences and nurse's classes and correspondingly enthusiastic over the service. Referred her friends, all young married women, some mothers of young infants and some expectant mothers.

Often dropped in at the Center's regular tea hour on Friday afternoons because she liked the Center and its friendliness.

At the end of six months was so appreciative of the service that she took out a family membership.

Another baby expected. Gave fullest cooperation through prenatal period. Profited by the advice and counsel given by the staff at the Health Center, and in the assistance given in the proper selection and purchase of maternity and infant's garments through the Center's cooperative store.

Fullest cooperation between family physician and the Health Center.

Confinement in hospital. On return from hospital, nurse's supervision in the home until strong enough to come into the Health Center.

Both children now under the supervision of the Center's health clinics.

During the past winter father returned from business feeling ill and feverish, but was not inclined to call in physician. Mother called the Health Center and asked if a nurse would call and tell them what to do. Response was given immediately. Found very high temperature and inflamed throat. Instructed family to call family physician. Case was diagnosed as a severe case of tonsillitis. Center nurse gave necessary nursing care under the physician's supervision.

Both father and mother have great confidence in the Center's activities and have learned many worth while lessons. This young mother is one of the best home makers we know, and most cooperative.

Case B

Family of father, mother and four children.

Income uncertain. Husband's wage supplemented at times by wife's efforts.

Father and mother foreign born. Speak fairly good English.

Mother came to the Center to inquire about the service and what it would cost. Stated decidedly she did not want to go to a free clinic, and could not afford to pay a physician every time she felt she wanted some information about health matters. Very desirous of learning the proper combination of American foods and their proper cooking. Stated she had had "much troubles" with sickness and felt if she knew the right things to do the whole family would be healthier.

Could not afford to pay for full family membership, so paid for it in quarter year installments. Has met every payment before the quarter fee was due.

Has come to the doctor's conferences and nurse's classes regularly. On the occasion of her first attendance at the nurse's classes, when leaving she thanked the nurse for "her speech and her cup of tea."

The four children have had certain physical defects corrected. Have shown a decided increase in weight, and general appearance greatly improved.

The mother has had nursing care in the home through a slight attack of pneumonia. Comes to the Center for general advice on many matters.

Center of great assistance last winter in having landlord provide proper heat.

This woman has learned a great deal about what the Health Department can do for citizens.

Never fails to attend the general meetings of the members of the Society and always takes a part.

Family a little more prosperous than a year ago. Mother is taking English lessons and learning to write. Very ambitious for her children to learn all they can of American ways.

Her first year's membership expires on September 18th. She has already indicated her intention of renewing it for a second year.

Report of Membership, Manhattan Health Society

September, 1923.

	Brought Forward	September	Total
Members interested through:			
Old members.....	148	12	160
Window signs.....	114	6	120
General publicity.....	31	0	31
Newspaper publicity.....	15	0	15
New York Diet Kitchen Ass'n.....	18	1	19
Henry Street Visiting Nurse Service.....	44	5	49
Maternity Center.....	4	0	4
Hospital	14	0	14
Physicians	12	3	15
Churches	1	0	1
Druggists	1	0	1
Other	33	0	33
	<hr/> 435	<hr/> 27	<hr/> 462

462 represents total memberships, individual and family, issued since June 15, 1922.

103 memberships have been cancelled for non-payment of dues.

359 memberships in effect October 1, 1923.

DISCUSSION

Mrs. Husk: With reference to the yearly fee, I should like to say the members of the society are recommending the increase of fees. They feel the present yearly amount is not enough. I wish I could bring to you something of the spirit of fathers and mothers who are being benefited by this service. I don't think we often see fathers as observers at baby conferences. A week ago last Thursday six came up to see just what was going on at the Thursday afternoon Conference. Their wives had told them so much about the Center. We have grandfathers and grandmothers enrolled to our support, and are re-educating the grandmothers in our educational health classes.

A Delegate: How will you meet the cost? Is there 75 per cent difference between cost and intake?

Mrs. Husk: You understand the members themselves are planning to direct the society financially. They are assuming financial responsibilities as fast as they can. At the present time there is a 75 per cent difference between cost and intake. At their last meeting a week ago our members were making definite plans for a membership campaign that is going to be put on very shortly. They are hoping to increase the society's membership to one thousand before the first of the year, and to increase the yearly fee. This is what they say they will do through the members enrolled. Thirty-five per cent of our present members have been enrolled through the influence of the members who have had the service. Twenty per cent have come through the medium of the posters which we display in some of the stores roundabout in the neighborhood.

Mrs. E. B. Weeks, Kansas City, Mo.: I should like to ask you if you get many people who cannot afford this and must have charity?

Mrs. Husk: Not as yet. The organizations already established provide a service for people who cannot afford to pay our fee. There are some people, however, of very limited means who do not want to accept charity. I have particularly in mind an Italian woman who came to the Center and said very definitely she did not want to go to a free clinic. She wanted the instruction that we gave. A special concession in payment of fees was made on her behalf, but she paid her membership quarterly and in advance. When her first year's membership expired she renewed it for another year, paying her fee of \$16 for a family membership in full.

Dr. Crane of Kalamazoo asks the number of members we feel we must have to make the society self-supporting. At the present rate of \$6 per person and \$16 per family, we must have at least 3,000.

Dr. Crane: And the physicians, do they do other work outside?

Mrs. Husk: They are all specialists and have their own private practice. They have, however, had special public health training on the regular staffs of the New York Diet Kitchen and the Maternity Center Association, and are assigned to our service from these two associations. They are merely transferred to our service. Our nurses are assigned to us from the regular staffs of the Maternity Center Association, New York Diet Kitchen, and the Henry Street Visiting Nurse Service.

Dr. W. H. Brown, Mansfield, Ohio: Do you know anything about the average income of the group you are teaching?

Mrs. Husk: Only as the nurses make their own observations. We do not ask any questions relating to the financial standing of the family, but we do know incomes vary from an uncertain amount to a tidy sum.

Dr. Brown: But approximately?

Mrs. Husk: From \$35 to \$135 a week. We know that definitely.

A Delegate: Do you find that the installment service is satisfactory?

Mrs. Husk: We do not. It is not satisfactory at all for two reasons. First, it makes our bookkeeping very complicated. And from the health standpoint, we find the installment plan interferes with continuous supervision. Mothers come in, for instance, and pay \$1.50 for three months' service, and are likely to rely on their own judgment as to the need of our service at the end of three months. If a baby, in their opinion, seems well and the Center doctor says it is, why should they come into the Health Center? They see no reason for continued supervision, and we do. As time goes on, the mother may not be certain about the baby's condition, and in, say two months, she will come in and report that the baby is not feeling well, and want service, but will be unwilling to pay for the period she has been delinquent. So we have, except in exceptional cases, done away with the installment plan, and we find we are doing fully as well in the enrollment of members.

Dr. Brown has asked what we do when our patients become ill, inasmuch as we do not give medical prescriptions in the Center. We refer the patient to the family physician. We do not give medical prescriptions.

Dr. Brown: Does he give you a record of the case when it comes to you, for instance, in the beginning, the record of the healthy child you have under supervision?

Mrs. Husk: Only in exceptional cases do we ask for records. We still have connection with the sick child because our nurse gives the nursing care in the home, and the nurse gets in touch with the family physician before giving care, and then gets the previous history.

Dr. Brown: That does become part of the previous record? In other words, the fact that he has been sick is kept on the record?

Mrs. Husk: Yes.

Miss Geister: Have you any idea of the average number of the physicians to the families?

Mrs. Husk: I am not able to give that, but it is proportionately small. I will say this, we are encouraging our members to come to the Center for advice whenever it is possible rather than have the nurses go to the home. The nurse always makes a first visit to the home, but we find it very satisfactory to instill in the member's mind that this is her Health Center and if possible, she should come in with her problems. It is economy of the nurses' time, and the members get into the spirit of the work.

Mrs. Bartlett, University of Michigan: This may be one question you do not want asked. What methods do you employ to keep the interest of your local committee alive, besides regular meetings?

Mrs. Husk: We have our posters and bulletins; we have some newspaper publicity in the local home paper, and we do find that our members are very much interested in seeing their names in the Harlem Home News in connection with the work. They like it.

Dr. Crane: What is the relation between the clinic physician and the private physician?

Mrs. Husk: Ours is an advisory service—it is a health protective service. For the medical treatment side we look to the family physician in cases of illness. The family-doctor sometimes consults the clinic physician. We take the name of every family physician when the member enrolls. It is part of our procedure to ask if they have a family physician, particularly with maternity work. We never give any of our prenatal care until we have advised the family physician that his patient is a member of the society. Naturally when a child is ill, the mother calls the family physician immediately. He takes care of the child until it is well. Usually the family physician is only concerned in an acute condition. In the maternity service we always send a report of the family doctor and he has access to our records.

Mrs. Heippke, Milwaukee: What do you pay your physician?

Mrs. Husk: Five dollars an hour.

Dr. Brown: When a physician gives his services for \$5, what is the service he renders?

Mrs. Husk: Miss Corbin, I am going to ask you to answer that. Miss Corbin is General Director, Maternity Center.

Miss Corbin: The doctor in the maternity clinic examines all patients, and if necessary tells the patient where she can get the best care for herself.

Dr. Cutler, Korea: What about the well child coming to the physician who charges \$5 per hour?

Miss Miller: If the child gets sick, the first thing the nurse does is to ask the mother to call her own private physician. We do not encourage calling the Center doctor who has had the child under supervision to visit the child when sick because of the feeling of the local physicians. If the mother prefers to, and has no doctor, she is privileged to call the Center doctor, but that is not encouraged.

Dr. Cutler: Is that \$5 included in the cost of \$6?

Mrs. Husk: Yes, in the estimated cost of the Center service. I would like to say, Dr. Cutler, we have many physicians who refer their patients to us for observation. We keep them under supervision.

Miss Leete is asking if the maternity care given for \$16 is plus the doctor's service.

We do not give a doctor's service outside of the Center. The patient may come into our Center for physical examination, and if that patient has her family physician we send our report to him. He knows our findings. If she goes to the hospital, of course she has no need of our services during the confinement period, but if she does stay at home, she has the advantage of our nurses at her home for day or night delivery and for postpartum nursing care.

Miss Place, Chicago: I want to ask whether or not you, yourself, consider this program you are having for a comparatively restricted district, a specialized program?

Mrs. Husk: Yes—being done by specialists.

Miss Boyd, Mansfield, Ohio: May I ask if local organizations are still functioning in the regular way?

Mrs. Husk: Yes, for the people who cannot afford to pay our fee, and others, of course, who wish their service.

Miss Boyd: May I ask this question? If a family can afford to pay their \$16, but cannot afford to pay an obstetric physician, then what do you do in that case?

Mrs. Husk: We have no way of providing obstetric physicians. We invariably refer them to a hospital offering free care.

Miss Boyd: What I want to know is, whether or not, if you take that into consideration in this self-supporting organization, they would then be entitled to obstetrical service?

Mrs. Husk: You must not forget that this service is for people who can afford to pay for it.

A Delegate: Along that same line, may I ask if a family in that particular district could not afford to go to the Manhattan Center, they could not get the services of the visiting nurses?

Mrs. Husk: They could not have our visiting nurses. I do say this, we do not neglect anyone. If anyone comes to us and makes a request for service and has not the money to pay for it, we direct them to the free agencies and endeavor to see that they get the service they want. A church, club or individual may purchase a membership for some needy person. I think we had about eighteen cases who had the advantage of our service at some one time under such conditions.

Mrs. Weeks: I should think your work would tend to show those people that a family physician is the right thing to have.

Mrs. Husk: It does.

Mrs. Weeks: What percentage of those families had family physicians when you went in there?

Mrs. Husk: We find, I would say, that 80 per cent have family doctors. I don't know whether that situation prevails in other cities or not, but it is rather startling to find out the great number of people who come into our Center who have not a family physician.

Mrs. Weeks: You teach them the necessity of having a family doctor?

Mrs. Husk: We teach them the necessity of being under the care of a family physician or health center. In every instance we urge the value of the family physician.

Mrs. Weeks: If you do nothing else but that, it justifies the whole thing.

Miss Dunlap, Illinois: May I ask just how far your physician goes in the managing and feeding of these babies, especially in those families where there is a family physician, and other families who might have a family physician?

Mrs. Husk: I am going to ask Miss Miller to answer that question. You understand our professional service is under the supervision of the three participating organizations.

Miss Miller: All I can say is, that he gives his services as far as the well baby is concerned; of course, if the baby is sick, it goes to the family physician. The doctor we have for the Center is a pediatricist, and as long as the baby stays well, he handles that baby.

Miss Dunlap: There is no objection from the family physician?

Miss Miller: Absolutely not, as far as I know.

Mrs. Husk: We are slowly and steadily getting the approval of the physicians in the neighborhood. Saturday morning, by mail, I received a check from a physician for membership for his mother, because he thought the society was "a good thing." Members have come in and told us their family physicians told them to come into the Health Center, because there are so many things they can learn there. When the physicians really understand our service, they realize what a help we are to them.

Miss Place, Chicago: How extensively do the men who conduct the infant welfare clinics become the family physician?

Mrs. Husk: Not at all.

Miss Place, Chicago: Do you mean to say that never does a mother call the physician she has seen at the Center when her baby becomes ill?

Mrs. Husk: She is not encouraged to do so from the Center. There are instances when the clinic physician is called for an acute condition, but I cannot say he becomes the regular family physician. In every instance I will say the Center physician has told them to come back to the clinic. The Center does not encourage its doctor to become the family physician. If the mother wants to call our physician from her own home, we cannot govern that.

Miss Place: The thing I am trying to get at is this: Do you, or do you not, control the men who do your welfare work to the extent that you say they may or may not accept the patient coming in?

Mrs. Husk: We do not.

Dr. Brown: May I say that this is one of the most significant programs I have listened to in the last five years in the line of public health? Certain aspects of your work have become problems for all of us. I feel that the big thing the Manhattan Health Society is doing, is to focus the attention of the middle class population on the desirability of having and paying for health care. I think I may say, that in about one hundred per cent of the United States, we have a significant problem in dealing with this middle class population; in providing health education and adequate medical service. The focusing of attention on this problem, I believe, will make one of the biggest contributions in the field of public health that can be made in the next twenty-five years.

**PRACTICAL METHODS OF TEACHING HEALTH TO
CHILDREN**

**FRANK J. O'BRIEN, Ph.D., Director, Psychological Clinic, Society of Mental
Hygiene, Louisville, Ky., Presiding**

THE PSYCHOLOGICAL BACKGROUND OF HEALTH TEACHING

FRANK J. O'BRIEN, Ph.D., Director, Psychological Clinic, Society of Mental Hygiene, Louisville, Ky.

A great many of us, I feel sure, attend conventions always expecting to hear something entirely new fall from the lips of the speakers, and when we do not, we are apt to return whence we came, to the field of our labors, disappointed and feeling that the time spent there could have been put to a much better purpose. So, in attempting to discuss today the subject assigned to me, namely, "The Psychological Background of Health Teaching," I will only attempt to bring out into the open some of the more important principles which it seems to me are being ignored, or, at least, are not receiving the emphasis their importance deserves. It is only by taking an inventory of ourselves and our work that we can ever hope to make the progress in health teaching in the years to come that can equal at all the development that has been made in the years just passed.

When we attempt to work out any of the practical problems dealing with the lives of human beings, we frequently find that we are not meeting with the degree of success we could wish. If we could take ourselves aside and "look ourselves over," we sometimes might find that in our attempt to reach our goal of accomplishment, we have departed from our original course and are in need of getting our bearings anew.

This phase of the science of medicine is still in its embryonic state. Consequently, we find ourselves in the midst of ever-changing conditions which necessitate that we be always ready to meet these needs. Our education must keep pace with the newly discovered scientific facts, or else we must charge ourselves with gross negligence.

The title of this paper would permit a discussion of the psychology of teaching as it refers to health education. Nevertheless, there are so many practical phases to the teaching of health which it seems to me are being neglected, in whole or in part, that I will attempt to point out some of the more important ones which, when ignored, make the practical teaching of health almost an impossibility.

However, I have fallen so far amiss in attempting to do my own little piece of work well that I find myself in a position similar to that of a certain darkey, the story of whom I heard very recently.

One day Mr. Samuels (this name will do), on learning that his house man was elected deacon in the church, sent for him and addressing him, said, "Jake, you big, pale, lazy, good-for-nothing thing you, who have never given a penny to the church and have never been known to help anyone, how did it happen that you were ever elected to the deaconship? You should be ashamed of yourself to so fool your fellow church members."

"Marse James," said Jake, "Ah tell you, 'tis just this way, the onery group in our church became so strong that we just nat'ally rose up and demanded recognition."

What is health? Should the concept of health be confined to the physical condition of the human organs? In theory, no, but what about practice? In the early days of public health activity, there was a tendency perhaps in the other direction by placing the emphasis of investigation on *res extra corpore* only. However, in a relatively short time, public health workers recognized that the influences within the body, mental as well as physical, also had to be reckoned with, if the health of an individual or community was to be bettered, or even maintained.

Do we in our clinical practice today look at health from this broad and only true point of view? How many clinicians in many of our communities today consider their duty other than making examinations of the human organs and then recommending or prescribing a general type of therapy? The latter is especially true where attempts are being made to treat what might be termed our behavior problems.

Again, is health correction confined to the actual physical conditions as presented in this or that individual? It seems so, for in how many instances is an honest effort made to go out into the community and clean up the entire situation of which the problem presented by the patient is but a symptom? Just what our duty is, then, in teaching health from the clinic point of view, is a question that demands much serious thought on the part of all of us who are interested in the field of health.

Are we all too involved in the health situation of which we are a part, whether it be in our private office, in our clinic, or out in "the district," to give to each patient the extensive and intensive care he needs and must have if his health problem is to be solved? When a person or family is "cleared" through the confidential exchange, and it is found that every health agency in town, as well as almost every charitable organization, has given help sometime or other, some way

or another, and this has been repeated time and time again, do we need any greater indictment against this superficial method of handling health problems?

Can we say the patient was cured if he comes back in six months or a year with the same complaint just because we considered our job done when we cleared up his condition, and ignored the true health problem in all its greatness that extended back into the patient's home, his neighborhood, his place of business, into his church, etc.?

Checking back on the work done with many of our families by organizations, health, charitable or protective, how often do we find that any concentrated effort on the part of all the agencies concerned has been made to clear up the entire situation, socially, physically and mentally? Too few, I am afraid, and yet we are apt to point to the great work we are doing, ignoring, however, the very great work we have not done. The question I think we must ask ourselves, if we are really honest in our work, is how long can we afford to continue in teaching corrective health measures by this most superficial method?

A DEFINITION OF HEALTH

This brings us, therefore, to the question, What is health? There have been many definitions given, but I think, for a working basis, we can say that health is a condition in consequence of which an individual or group functions most efficiently. In other words, health, as we should understand it today, is not confined to the physical condition of the body, but is much greater and broader and includes all of the influences that play a part in the activity for which the individual or group were intended.

The teaching of health may be accomplished in two general ways: First, by the results of examinations and subsequent treatment and by clinical demonstration; secondly, by propaganda carried on especially by posters, advertising, addresses, round table discussions, newspapers and magazine articles.

The propaganda aspect of health education seems to me to be far in advance of the work accomplished through our clinic facilities; that is, it seems to me that the propaganda methods of teaching health are not as heavily fettered by conditions that need correction as are our clinical methods. Have we not seen demonstrations or health exhibits which have promised a great deal through efficient advertising and propaganda, only to "fall flat" because of the actual work attempted?

It is because I feel this to be so true that I will confine my efforts to an attempt to discuss what appear to be some of the more important phases in the psychology of health teaching from a clinical point of view.

The teacher, the individual or group being taught, and the subject matter, are the three phases of any health program. Although it would be perhaps advisable to attempt to discuss each of these phases individually, they are so intimately bound up one in the other in the actual working out of any health program that it will be perhaps more practical to consider them all together.

When one attempts to teach health to others, we take for granted, or at least, we should, that anyone assuming this great responsibility of instructing others, is well-fitted to do so both by training and by experience. And yet, much to our surprise, we find attempting to do this work, individuals whose chief qualification to instruct others in the laws and practice of health is that they vote well, or that they "think the work interesting." The necessity of removing such leaders, at least from health work, is so evident, that we will pass on with just this mention of it.

The first duty of a health officer, it seems to me, is definitely, concretely, intelligently and honestly to decide upon his demarcation of function. I am convinced that in too few places today where health is being taught, has there been a conscientious attempt to carry out to its ultimate conclusions the real duties of health teaching. This is due chiefly to the fact that sufficient effort was not made to define their function.

When I say there should be a demarcation of function, I do not especially mean that an agreement among the several groups is necessary because this group or that group in the health field is attempting to do what is the work of another, although this does happen. But I particularly refer to those who do not go far enough in carrying out their responsibilities.

It is not an uncommon occurrence for many of us to see a patient who was examined somewhere or other, and to learn that the examination revealed that he was in need of some special treatment. But on questioning, we learn that nothing was done. Apparently the clinician thought he had done his duty in discovering what the patient needed, and, as no one else assumed the responsibility of guiding the patient, he did not receive the much needed care. Will anyone deny that somewhere along the line someone failed in his duty? But who did

fail? Was it the patient, the clinician, the nurse, the social worker, the probation officer, or who?

I think that we can absolve the patient. He comes for assistance, and if none is given him, as a rule, he can do nothing further. Is it the nurse or social worker who has failed? Partially, perhaps, because either one, if properly trained, should know in many cases at least that the patient was not given a square deal and, consequently, should work with the patient and see that he receive the necessary help. I think there is no question but that the responsibility is primarily that of the clinician. But, immediately it is asked, what is the duty or responsibility of the clinician? Is it only to examine patients and record, or not record, the results as suits the custom of the particular clinic, or the whims of the one in charge, and stop there? If this is the limit of the clinician's interests or duty, then, I ask, why examine at all?

And yet, this mockery of the greatest of all sciences, medicine—because medicine is directed toward the betterment of the most valuable of creatures, the human being—is a practice that is in vogue in many of our cities where good health work is supposed to be practiced. Allow me to cite an example.

Once, not long ago, a boy was referred to a clinic because of a behavior difficulty. The physical examination given elsewhere revealed a mastoiditis, and yet no one thought it his duty or responsibility to see that this child received the treatment he needed. When another health group did make arrangements for the operation, a more complex examination revealed a double mastoiditis. Helping the boy to secure the treatment he needed was the duty of no one, and everyone was satisfied, for a record was made that a mastoid case passed through the clinic, which was sufficient in the case. An agency interested in the case from a very different angle, was courageous enough to assume the responsibility that another had neglected, and the boy was treated.

Another boy, age eight, had a syphilitic keratitis. He was referred to the proper clinic and treatment was administered. But was any attempt made to have the other members of the family examined? No! Because, again, it was no one's responsibility, apparently everyone was too busy; there were too many other patients who were coming for treatment to make it necessary or advisable to go out of the way to get others into the clinic. That some day the clinic would have to handle the other members of the family, perhaps when it was too late, is a truth that the health teacher must settle the best way he can between himself and his conscience.

Is a health agency doing its duty when it neglects to investigate the avenues opened by such a case as this?

Again, we must ask, What is the demarcation of function? Is it the duty of such a health agency to confine its efforts to the treatment of patients who come to it, and ignore the general conditions that make complete recovery from the disease possible? Is not this the most perfunctory way of attempting such an important work? Are we not too easily satisfied with statistics, regardless of their value? Are we not perfectly satisfied if we can show that we have dealt with so many patients, or have given so many treatments or interviews? Yes, it "listens well," but suppose our better selves made up another set of statistics on the opposite side of the book, showing the number of cases we did not treat thoroughly, the cases we did not study completely, the cases we lost track of, because it was not our duty to follow them up, and the cases we never treated because we stopped short in the full performance of our duty? Would we still be satisfied that our work was well done?

Let us go a step further and assume that a very thorough examination and investigation had been made. Is this sufficient? And yet again, this is where too many of our clinicians stop in their work. Is the treatment or care necessary to be left to a hit or miss procedure? Will the nurse try her hand at interpreting what is best to do, or will the social worker, or who?

Again, it is the duty of the clinician not only to make a thorough study and examination of the case, but to interpret the results in the form of understandable recommendations. Recommendations should be so worded that they mean something to the worker who has to deal directly with the patient in carrying out the clinician's treatment; the worker must be "taken in" on the case and not just directed to see that so and so is done. The more the co-worker appreciates the reason "why" a certain type of treatment is necessary, the better she is fitted to do her part. The co-worker, whose duty it is to try and see that the recommendations made are carried out by the patient, must not mix up his (or her) ideas about what the treatment should be with what is recommended. The clinician is, or should be, in a better position to know what the particular patient needs, and for this reason, no modification of the proposed treatment should be attempted without first discussing with and getting the approval of the diagnostician.

Neither should a worker attempt anything other than what was directed. Every once in a while a worker does this believing that she knows the situation well enough to do so. As a result of such acts, grave set-backs in treatment have occurred. Consequently, in emergen-

cies only, should a worker attempt anything other than what the clinician has recommended.

The clinician holds the strategic position, first, because of his general training and experience, and secondly, because of having full knowledge of the case in question. He must, consequently, if the patient is not going to pay the bill by being neglected, follow up the results of his examination with individual, concrete recommendations.

It is not sufficient to say the patient should work. The social worker or nurse should be told the particular type of job the patient can do, and it is well oftentimes to mention those he should not do. He must especially tell the type of amusements and recreations the patient needs and not refer to them in general, for what he would recommend for patient "A" might be a "new infection" for patient "B." Also, it is not sufficient to say the family must move, but he must tell the type of neighborhood they should move into, the size, etc., of the home they need—and so we might go on and enumerate many other examples.

THE NECESSITY FOR COOPERATION

In this connection, I believe it is well to bring out a point I think is most valuable, and that is, the necessity of wholesome cooperation on the part of all working on a problem, the physician, the nurse, the social worker, the clergy, the psychologist and the like. Before cooperation can be had, there must be a thorough understanding of the case by all concerned. It is the duty of the clinician to explain the "whys and wherefores" of the case, his findings and recommendations. Otherwise, he cannot expect any intelligent co-worker to carry out his recommendations with any degree of success. Only when all working on a case are duly informed about it, will the patient receive the assistance due him.

There are relatively few health programs, worthy of the name, that can be brought to a successful, practical conclusion by any one individual or single agency. For this reason, each one of us in our respective fields must realize that we are dependent upon many other agencies for the proper carrying on of our work.

The doctor cannot give his patients the best care without the help of a nurse, a social worker, a psychologist, a technician or another physician, and each one of these trained people brings to the solution of the case a phase of knowledge that no other one can. Consequently, an honest appreciation of the value of cooperative agencies is essential today for the carrying out of any real health program.

Once the interest and cooperation of the more important groups of the community (public schools, juvenile courts, social and health agencies, women's clubs, noonday clubs, ministerial associations, and the like) have been obtained by means of propaganda, it is the duty of the clinician to hold and cement it by conscientious, thoroughgoing and accurate work. There is no factor that will cause a community sooner to lose its interest, and to withhold its support in any work, than superficial or inaccurate performance of that work.

Man is a very suspicious animal, especially where new ideas and his money are concerned. Therefore, let all our health activities be so conducted that the results obtained by real scientific work will not only secure, but hold, the support of the community where it is being carried on.

Another factor too frequently observed, which has a profound psychological effect upon patients, is the way they are treated in some of our clinics. Too frequently do patients tell us that they will not return here or there because of the treatment accorded them. They will deliberately and knowingly deprive themselves of the help they need rather than subject themselves to a very unpleasant ordeal. As long as those of us in health work fail to recognize that our first duty is toward our patients or those for whom we are working, we can never expect lasting success to crown our efforts. Whether this thoughtless or domineering attitude is due to faulty professional training or faulty home training, or to both, is an important consideration which we can but mention here.

In summary, therefore, the clinic or individual employed in the teaching of health, must keep in mind the broad concept of any health program as it is considered today; that examinations must be complete and thorough; recommendations must be specific and within the grasp and understanding of the allied workers in order to bring about a better condition of health in the individuals being treated; that the preservation of health or the eradication of diseases can no longer be confined to the study of the body, but must ramify outwards until every possible influence bearing upon the life of the patient has been taken into consideration in the general upbuilding of the patient; that the mere making of recommendations is not sufficient; that a system must exist which will enable the clinician to check up the results, or lack of results, that follow the carrying out of such recommendations.

Very important, still, it must be remembered that each group in the social field, whether it be the physician, the nurse, the social worker, probation officer, psychologist, or any one else, has a particular serv-

ice to render, and that no agency of itself can ever carry out a health teaching program that is worthy of the name, and do it alone. To ignore or to minimize the value of the assistance that another group brings to such a program is a sure way of reducing our own efficiency.

If we but recall the value of the psychological truth, propounded by Horace (which most of us may not admit), namely, "There is no one, no matter how humble, who does not appreciate having nice things said about him," we can see how important it is to see to it that they who are giving the best they have in aiding us, know that their endeavors are appreciated by us. Justice demands it, natural selfishness makes it expedient.

Keeping in mind the importance and size of our work, and our true position in it, combined with a conscientious attempt to observe the rules that should guide our behavior, will make more possible that advance in health education and in health practice which you and I earnestly desire.

HABIT FORMATION—HEALTH PREPARATION FOR SCHOOL LIFE

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The formation of habit in young childhood is a very large subject. Interpreting habit, as we do nowadays, to include all that the individual acquires through experience, the topic really means a discussion of the whole process of learning during early years. What I have really been asked to discuss, then, is the problem of pre-school experience as it bears upon school experience. The purely physical phases of this problem are being adequately handled by other speakers in this conference. I take it that my discussion should be centered upon habits determining mental health in young childhood and their bearing upon school experience.

Those of us who have undertaken the task of the training of very young children feel the responsibility heavily. Little children are very responsive. This morning, Miss Henton, the head teacher of our little nursery school, in discussing with me the results of certain types of training and the rapidity with which effects can sometimes be produced, said to me, "Do you know, I am constantly frightened at the ease with which little children are modified, the way in which they imitate what we say and do. It throws a great responsibility upon us." I am sometimes asked how we know that we are right in the decisions we make as to the type of training which should be applied to young children and the kind of influences which should surround them. My only answer is that we do not know; if we did, we should be omniscient. All we can do is to use the best resources which science can furnish us, to understand the phases of development through which children pass, and our best judgment in trying to surround them with favorable influences. Whether we wish it or not, personalities are being constantly and profoundly modified by the environment of early years. The best we can do is to see to it that the environment is such as to foster that which seems best in character and personality and suppress that which seems undesirable. None of us, however, are blind to the fact that that which seems best now, may, in the light of further evi-

dence, seem undesirable later. Many of the methods and ideals of today would have been condemned in the past generation.

THE HABIT OF ATTENTION

With this full confession of humility, let me go on to state what seem some of the outstanding types of reaction in young children which may further or hinder their school life later on. As my first problem, I would like to discuss the question of the power of attention in young childhood. Part of a child's school success will depend upon his ability to concentrate his attention upon the material presented to him. My own conviction is that children differ naturally and by inheritance in power of attention. It is also true, however, that certain types of treatment tend to further the development of attention and others tend to hinder its development. Differences in the power of attention are observable in infants of less than six months of age. I have known some babies who were so intent upon the things in which they were interested that it was almost impossible to distract them—babies of five months who could spend twenty minutes or half an hour absorbed in examining some new object. Other babies of the same age have an exceedingly distracted type of attention and are easily diverted from any pursuit. The type of treatment in young infancy which tends to foster attention is that which does not needlessly interfere with a child's activities. Millicent Shinn in her "Biography of a Baby" says, "Never needlessly interrupt a baby's staring." The staring of babies does not seem important to the average adult yet it is an essential part of the learning process in young infancy. The characteristic staring of babies means that they are learning, through the eyes, the objects in the world about them. The child who is intently absorbed in observing some new object is learning just as definitely as the adolescent who is solving a problem in arithmetic. If adults have no respect for the activities of young childhood, but are constantly interrupting them for their own convenience, the child does not have the same opportunity for learning to maintain these activities, as if he were left uninterrupted to finish what he was doing. The child who is made the plaything of adults, or who is constantly made the convenience of adults, lives a very distracted type of life, which does not give him a fair chance for uninterrupted attention.

A child's power of attention also depends in part on what he has to attend to. None of us can attend to subject matter unless it is within our range of experience and suited to our stage of development. If you expect a baby or a young child to maintain his activities, then you must furnish him with materials which are suited to his stage

of development. He must have something to attend to which has some chance of holding his interest. It is, then, essential to know just what occupational materials are suited to each age and stage of development in young childhood. Much more study and research is needed to give us a scientific background for judgment. It is, however, perfectly safe to state that a child who can be given materials to work with which will keep him interested and legitimately busy without outside suggestion and interference, is being furnished an environment which will tend to develop his power of attention. The habit of attention will, of course, apply to his school work when he reaches the point of entering school.

The third aspect of life which modifies a child's power of attention is that of the general emotional background of the family. The child who lives in an atmosphere of calmness, confidence and sympathy is himself apt to be easy in mind and has a chance to learn the habit of command of his own mental processes. On the other hand, the child who must live in an atmosphere of constant friction and emotional disturbance is himself frequently disturbed emotionally and fails to develop the habit of self-command. The background of his consciousness is apt to be one of distraction and disturbance. When such a child enters school, he is at a disadvantage in attempting to keep his mind on the new things presented to him. No one can question the importance of power of attention as a factor in success, but few of us have realized how profoundly the habits which underlie attention are modified by the type of experiences of early childhood.

THE ATTITUDE TOWARD PROPERTY

The second set of habits which may have a profound influence on a child's school career has to do with his attitude toward property. I have known children of one and a half years of age who had a good conception of what was theirs and what they could therefore rightfully take and play with, and what belonged to other people and could not be taken without asking. Whether or not a child has such a conception depends, of course, upon the way property is treated in his very earliest years. In some families, no stress is put upon "mine" and "thine." There is a common background of possession and the children are allowed to take anything in their environment which they desire. Such a child, when he comes into a new place, is sure to run around and grab anything in sight which attracts his attention. If this type of behavior is allowed to go on unchecked until the child is three or four years old, it is then exceedingly difficult to correct. By

that time, he has formed the habit of thinking that he can take and handle anything which he can reach. In a schoolroom, such a child is always difficult to control. He becomes a constantly disorganizing element, and he may even be accused of dishonesty simply because he has not understood property rights.

Another element of experience which modifies a child's attitude toward property is that of whether or not he learns the correct use of common objects early. I have seen some young children who misused property simply because they did not understand its correct use. We had one instance in the nursery school of a child who had been brought up in an institution until he was two and a half years old. Although his physical care had been excellent, he had not learned to talk, and had such a very limited experience with the common objects of the world that he simply did not know the correct use of many of them. A fork at the table was evidently an entirely new experience. The child was much pleased with this new object but had no notion of what to do with it. He was just as likely to jab the child next to him as to put it into his mouth. Neither did he understand the use of cups and glasses. He had probably dealt only with unbreakable ones. It took a long time to teach him as much about the correct employment of everyday objects as most children, in a normal home, unconsciously acquire by the time they are a year and a half old.

The third element of training which modifies children's attitude toward property is that of the extent to which parents feel the responsibility of giving them the things which they legitimately desire. We had one child of four in the school who stole things from the other children, hid them in his locker, and denied that he knew anything about them. This child came from a home in which both lack of money and constant disagreement between the parents led to a very restricted and disrupted type of home atmosphere. The children were thrust aside and got little attention unless they did something so obstreperous that they forced it. Very little was planned for them or given to them. Our small boy had found, through bitter experience, that the only time he ever got anything for himself was when he grabbed it and got away with it. Sometimes he was successful and was allowed to enjoy what he had grabbed undisturbed; at other times he was deprived of his ill-gotten gains and punished. It all depended upon the mood of the parents or the nature of the object which he had grabbed. So far as the child knew, there was no way of telling whether he was going to be punished and deprived of his ill-gotten gains or allowed to enjoy them. He had made up his mind that it was worth while to take a chance and see whether he could get away with things. When

this child stole things at school, our method was to try to convince him that the teachers of the school were there to give him anything they legitimately could, and that the correct way to get things was to ask for them, not to attempt to take them away from other children. Punishment in this instance would have been of no avail. It was what the child was, in a measure, expecting and was willing to endure if necessary. What he needed to correct his habit of stealing was to acquire a new point of view about property and how to attain it. However, even at four, the habit of "grabbing what he could and taking the consequences" had become firmly established and was difficult to modify. That it could have been done, however, with any proper cooperation from the home there is no doubt. The child who enters school with such an attitude toward property is certain to be at a disadvantage. His attention and interest are on the wrong things, and the fact that he becomes a disturbing element in the schoolroom subjects him to a type of discipline which tends to distract from school work.

ADAPTABILITY

The third set of habits which I would like to discuss in their relation to school life is that of the child's adaptability to other children. Very early in life habitual social reactions appear which tend to modify the child's relations with his fellows. Some children acquire the habit of dominating people about them; others acquire the habit of undue acquiescence and submission. Either extreme is bad. We have had one child in our little school who could not resist the temptation to dominate every situation in which she was a part. This child, like others of her type, was very brilliant mentally. She was a child who learned to read fluently at the age of four years, with very little assistance and no systematic teaching. When at three she entered our nursery school, she proved to be so bossy and insistent that it was very difficult to conduct the work of the school with her in it. Her little voice was always sounding out above the others insisting that she could do it, that it was her turn, and that she must boss the game. She was not willing even to let one of the teachers show some other child about his piece of work; if possible, she would thrust herself between and demand that she be the one to be shown. No one questions the value of leadership and executive ability. Doubtless this child had the elements of them well-developed. On the other hand, no one who insists on bossing everybody about him can possibly make the best use of his powers

of leadership. The result is merely to antagonize, not to lead. We were exceedingly interested to know what had established so fixed a tendency in a child of three years. Her history was as follows. She had a very difficult birth in which both mother and child narrowly escaped death. Because of injuries and digestive upsets at the start, the first few months of her life were a constant struggle. When she was seven months old she weighed less than she had at birth. The doctor's instructions to her mother were that she must never be allowed to cry, or be unhappy, that every want was to be fulfilled as soon as it was expressed. Doubtless this treatment was necessary to save the child's life, but the result of it was that by the time she was seven months old she had developed the feeling that her desires were the most important thing in the world and must be immediately met. The sense of her power over other people, in that every want expressed brought immediate service, was also part of her attitude. While it is doubtless true that the child's habit of dominance was started in this way, it is probably also true that more might have been done to correct it than had been done up to the age of three. She was the only child of somewhat elderly and very admiring parents, who could not resist the pleasure of showing her off. It required months of patient effort at school to produce any effect at all upon her habitual mode of reaction. She finally left the city when she was a little over four, and although we could see a distinct improvement, she still needed further training to bring her to the point where she would be reasonably adaptable to other people.

There are some children who fail at the opposite extreme, who are so pliable and so ready to take suggestions that they allow everybody else to take the lead, and fail to get their fair share of training and responsibility. These children are usually far more popular than those of the dominating type. The most popular little girl we ever had in the school really had no ideas of her own and started nothing, but was always ready to fall in with other people's plans. If the children wanted to play doctor, she was always willing to be the patient and allow them to operate; if they played house, she would be the baby and be lugged around to their heart's content. All this was very satisfactory to the children, but the adults felt concerned that she had so little influence in determining the course of events for herself.

Perhaps no other factor is more important in a school career than the correct attitude of give and take with one's fellows. Our experience leads us to believe that association with a group of children is extremely important in developing social attitudes in very young chil-

dren. The child who must wait until he is five or six and enters school to have association with others of his own age may easily be at a disadvantage all his life in his power of adaptability to others.

THE ATTITUDE TOWARD AUTHORITY

The last set of habits which I can discuss this afternoon is that which has to do with the child's attitude toward authority—his relation, not to other children, but to parents, teachers and others who are in command over him. Many young children develop habits of contrariness and opposition toward authority. Contrariness is a natural stage of development through which most children pass between the ages of two and a half and four years. It is part of the development of a sense of personality. If this natural and necessary kind of contrariness is unwisely treated, it may easily become fixed as a permanent attitude toward authority. There are at least two types of mismanagement of young children which tend to produce this result. One is that of demanding absolute obedience on every small point. The child of whom too many demands are made and who is allowed no leeway for his own decisions, is almost sure to react with rebellion, either open or secret. He is, in self-defense, forced into a desire to refuse to do just as much as he dares to refuse. It may be expressed in open rebellion, or if he does not dare that, in a secret feeling of opposition to adults. Another type of treatment which develops a different kind of contrariness is that of too much discussion of the necessary details of a child's régime. If nothing is taken for granted, but every question discussed, and the child allowed to take a hand in this discussion, he soon gets to enjoy the disputes and particularly to enjoy the process of getting his own way about it. Such a child develops a love of a row. In either case, he becomes an exceedingly difficult problem when he enters school because the habit of rebellion, or of continual argument, is at once transferred from parental authority to school authority.

The points which I have been able to discuss this afternoon are merely illustrations of the way in which the habitual attitudes of young childhood affect school progress. There are other perhaps equally important aspects of the problem which I could discuss if I had the time. I hope, however, that these illustrations have been sufficient to convince you of the fundamental importance of the type of treatment accorded to very young children, and the way in which the mental and emotional habits of young childhood may make or mar the child's school career.

TEACHING HEALTH TO LITTLE CHILDREN

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It is very important for adults to have a right idea about children. Many of us think that childhood is a mere preparation for adult life, and that the sooner we can make children responsible and train them into the duties of adult life, the better.

The child is not like an adult, neither is childhood a preparation for adult life. Childhood is its own excuse for being. There are needs and purposes in growth which the adult is bound to respect. The child cannot escape us. The child is absolutely the victim of the environment which the adult provides.

Education itself is growth, and therefore the school program, as well as the home environment, should be merely right conditions of growth. The one fundamental principle which adults should have, deeply established in their subconscious minds, is that education is life, and growth, and that everything and anything which ministers to growth is educational, and whatever does not minister to growth is uneducational, however desirable we may think it.

The supreme questions, therefore, are these: What are the needs of the body? What are the needs of the mind? What are the needs of the spirit of the growing child? I submit that one of the needs of the body is that the order of the development of the nervous system shall not be violated by any work of the school; that the body should be allowed wholesome freedom; that all specialized activity shall be postponed until a later period. This alone would mean quite a revolution in our public school system. It would mean, first of all, not more than twenty pupils to the teacher, and that all intellectual activities, such as reading, writing and numbers, would be postponed until eight or nine years of age.

The mind needs interest. The fundamental condition of thinking is interest. The school will then ask: What are the interests of childhood?—and will endeavor to provide these. We know that all children are interested in things of the sense—in handling, creating, investigating and experimenting—in other words, in making and using

things. This would mean that the school would be turned into a workshop and that tools and material would be provided for the most wholesome sort of self-prompted, creative activity.

The spirit needs sincerity. This means that the child's desires, initiative and purposefulness must be respected. The inner satisfaction which is experienced in attaining ends and the consciousness of power through the accomplishment of one's purposes is absolutely necessary to the sincerity which is the basis for all moral development.

The spirit should be fearless. Self-consciousness is fear. Fear is death. Education is life. Therefore, the school must not permit, much less impose, conditions which develop self-consciousness or fear. All grades, marks, systems of promotion, make for self-consciousness and are, therefore, inimical to the health of the spirit. A program of self-prompted, creative activities—of music, dancing, nature and stories—will provide sufficient wholesome occupation for all children of the early elementary grades.

Now, even after the school and home have provided this sort of program, there remains much to be done in developing not only health habits in the child, but the consciousness of well being. The child must not only be kept clean, but must prefer cleanliness. The child must not only be taught to eat the right food, but must be helped to desire the right food, and as early as possible, should be taught to discriminate between wholesome and unwholesome foods. Not only must the adult insist upon long hours of sleep, but the child must be taught the reasons and should grow into self-control and self-direction in these matters.

Any method which does not make for priggishness, self-consciousness or subtle deceit should be used to develop in the child, as early as possible, the power of discrimination between that which is wholesome and unwholesome, and to develop in him a desire for the things that are best.

TEACHING HEALTH TO OLDER CHILDREN

MAUD A. BROWN, Director of Health Education, Child Health Demonstration,
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The teaching of health to older children begins with the establishing of a sound health program, if it has not been done where it belongs, in the early years. If this has not been accomplished, the appeal to the adolescent girl and to the pre-adolescent and the adolescent boy must be through different motives from those upon which we urge observance of the very same health program by the little people.

Of all human creatures, the most difficult for the average woman to understand, and hence successfully appeal to, is the pre-adolescent male. The boy of twelve is the most male creature, psychologically, in the world. The woman teacher might as well be non-existent. He merely tolerates his mother—and his sister is an irritating foreign body. Since there are not enough school men to go around, the best among them should be selected and put into the Junior High Schools. The wise woman will also combine with other wise women and see to it that there are available good men in public places—as school men, ministers, Scout leaders, city officials.

In teaching health, then, to the pre-adolescent, the teacher, usually a woman, would do well to keep in the background, making her appeal to two outstanding psychological characteristics:

1. He is at this age an entirely self-centered egoistic male.
2. He is a member of a gang.

These two characteristics may seem mutually exclusive, but they are not. His gang spirit is not the altruistic desire to benefit humanity which appears in adolescence, but an extension of his ego. Belonging to a gang simply increases his personal prowess.

In spite of its dangers and abuses, the solution of the problem of teaching health to this boy lies chiefly in group games and athletics with some element of competition. To eliminate the dangers and keep the punch is one of the big health education problems. This is too large a problem to undertake to discuss in a fifteen minute paper.

This new thing within the boy, this newly established personality, is a rambunctious thing which bursts and blurts out in various obnoxious manifestations often as unexpected to him as to his shocked family. This inner urge he feels to assert his entity may be capitalized by the health teacher in loosing him into a sanitary survey of the city. Let

the boys fix the blame for this adult inefficiency. The teacher can very easily convey the challenge that they would probably be worsted if they should presume to interview the potentates of the City Hall or the press, and if skillfully done, this suggestion will send them rooting through all the libraries in town for Government Reports, and smelling up the school laboratory or the kitchen at home with experiments.

A sanitary survey of the school building and grounds is valuable in the same way. It also makes use of the boys' interest in mechanics. The study of the heating apparatus, of the humidifiers, the use of the anemometer to detect air currents, of the psychrometer to measure the humidity, making a cobalt lady to puzzle their mothers with, the use of the foot-candle meter to measure illumination and the devising of a home-made substitute, the detecting of faulty school plumbing, the interviewing of school engineers (the school engineer of the system where the 8th grade made the survey from which I shall presently quote, expressed himself as being only too glad to give his time to the committees who interviewed him for the sake of the greater cooperation the pupils would give in taking care of the building and grounds). The possibilities for tying this survey up with civics, English, general science, arithmetic, geography, history, as well as hygiene, makes it an ideal "project."

The girls are as much interested as are the boys, but being physiologically older, the appeal it makes is the more altruistic one of adolescence. The girls are more interested in the housekeeping of the school—cleanliness, *per se*, the condition of toilets, washbowls, presence of soap and toweling. The boys, however, are just as keen when it comes to the making of bacterial cultures, showing the fly's footprints, the finger tips before and after washing, the door knobs likewise, the toothbrush unsunned and after sunning, or air in a room half an hour after dry sweeping and after the use of vacuum cleaners. The possibilities are limitless. (The conducting of such a project, let me say parenthetically, is not an easy-chair job. It can, however, be worked out by any teacher and vastly repays the effort expended.) The teacher can thus "ease him" into work which he will find himself following with a zest while he would summarily have rejected it had he been suddenly exposed.

With the connivance of the physical education teacher, or the Scout Master, a course in camp cookery can fill in the chinks—and lo, the boy, all unsuspecting, has swallowed a large dose of health instruction. If, in addition to the camp cookery (which, of course, emphasizes the reasons for the selection and treatment of the foods decided upon

for camp fare), there are given a few simple experiments—an analysis of milk, the Fehling's solution test of fragments of baked potato and of the same fragments fried in grease, the relative digestibility of coagulated and coddled egg-albumin, he will use this superior knowledge to paralyze his family when he loftily rejects the offerings of the frying pan, or demands the milk, but yesterday scorned as "baby feed."

HELPPFUL ALLIANCES

His mother, if she is the successful wife of his father, has long since learned the wisdom of disregard of inconsistencies. In fact, from observation of the methods by which my more fortunate sisters lead their husbands to discover that they have just decided to do something which friend wife had made up her mind some weeks before that he would do, I am led to believe that her technique is about the same that the successful woman teacher of the Grammar School employs to induce the boy to develop sound health habits. Her job is that of *dea ex machina*. She sets up an underground railway connection with his mother (or if his mother bridges rather than mothers—with his father). She is "in cahoots" with the school nurse who can very often get the piece of advice across to the mother who will not take it from that old maid school teacher who "never had any of her own and so knows how to bring up ours." The nurse, who gets an eyeful each time she visits the home, discovers the open garbage pail, the hermetically sealed windows, and in the course of science, geography, mature-study, what not, within a few days, the needful instruction is gotten across by the teacher. Don't tell me it doesn't function—it does. Too many mothers have told me about it, their pride in the child overcoming their sheepishness regarding their own guilt. And then there is always "him" to blame it on.

The teacher is hand in glove with the school doctor. She tips him off to the fact that Bill goes five nights a week to the movie, and that Jimmy has taken to keeping the table between her nose and the telltale aroma clinging to his corduroys. So the doctor discovers evidence when he examines Bill of the effects of late hours already telling on him, or looks wisely up from his stethoscope to say—"you're smoking, are you? You'll have to cut that out if you have wind to make any team."

She is in league with the Scout Master who scornfully refers to the movies to which Bill has been addicted as "slush." If the Scout Master is a young man of the variety sometimes characterized by the adjective "he," that one word accomplishes what the combined feminine influences of Bill's environment could not do.

Most difficult of all, she insinuates herself into the good graces of the "janitor," or the "chanitor," or the "custodian," whatever the local nomenclature and extraction happens to be. The most difficult and serious of all school health problems is that of school sanitation. There exists scarcely a school system where adequate standards are not duly written down on paper. They are even posted in the furnace rooms. At the same time, the teacher knows that he is more securely intrenched in his position than she is, and that his standing with the Board of Education depends upon his saving the taxpayers' money. Some boards offer bonuses to the janitor who spends the least for "supplies," meaning paper towels, toilet paper, soap, sweeping compound, as well as others not so directly a health problem. This is a problem which must be handled by combined public sentiment. But, pending this, much can be done by the teachers to anesthetize the patient against the painful loss of the bonus.

Health may be taught to little people in the face of inconsistencies. But teaching health to older children must be consistent. It is wasted breath to teach fresh air when his nose knows that he never breathes fresh air either at school or at home, and still, apparently, nothing happens.

The health lesson for older children must be part of a consistent school program. This is, of course, equally important for the little people, but is much more easily attained in the flexible primary program. So important is this that it is almost a waste of time for any health instruction to be given as a part of the rigid routine and unnatural strain of the average seventh and eighth grades of the school. It is still worse in High School. In addition to the drive after passing grades, the chafing against forced application to unattractive, hence arduous, tasks, the home forces the girl to practice various accomplishments when she should be out playing ball, and the athletic director of the school, or of the Y. M. C. A., by too great stress on winning, or by unwisely selected activities, turns the boy's out-of-door sport into fatigue-producing work.

The teaching of health to older children presupposes that the pupil is already familiar with the gross features of his own mechanism and their general functioning. It would be an insult to Tom's intelligence to expect him to run a Ford for ten years without ever lifting up the hood. The boy is just as interested in his own mechanics. As a matter of common general information, the pupil by the 5th grade should know the main features of his own anatomy and their operation.

Since my time is more than used up, and one group only of the "older pupil" assigned me as my topic has been considered (the most

difficult, the pre-adolescent boy), may I suggest that the problem of the girl is being very earnestly and efficiently worked out by the home economics teachers of the country. Referring to their literature will bring suggestions sufficient to keep the live teacher busy adapting and developing for a long time.

To recapitulate:

The teacher of the older grade pupils—seventh and eighth grades—should expect to find a foundation already laid of

1. An established health routine, including the real health essentials, and the child equipped with the main reasons for its observances. If this has not been accomplished, she will have to begin here.

2. A sanitary school environment which does not render her teachings ineffective. If this is not accomplished she will have to begin here.

3. A school program which does not undo her precepts both as to her own health and her pupils'. If this is not accomplished, she will have to begin here.

4. The main points of anatomy and physiology already familiarized. If this is not accomplished she will have to begin here.

If happily all these foundations are established in the pupil's habits, all she has to do is to follow his intellectual development with more and broader motivation, so that, as he grows beyond the reach of the appeals which have established these desirable habits, he may be furnished another and still another to take the place of the outgrown one before the habit be discarded with the first reason—that's all there is to teaching health to older pupils.

DISCUSSION

Mrs. Lorne Weber, Commissioner of Girl Scout Council, Detroit, Mich.:
I know a dear, sweet old lady who has always been very active in public life. One day, I asked her how she had been able to accomplish so much, and she said she made a practice of never refusing to do anything that was asked of her and, when the time came to do it, the Lord always gave her the ability and strength. I have tried that and it doesn't work. I am still waiting for the ability to write this paper and, making no pretense of being a public speaker, right now, I feel far from strong. However, like the dear old lady, I will try to do what was asked of me, and if you will please keep in mind that I cannot handle this from a scientific or professional point of view, but only as one who is intensely interested in girls and in the programs I am representing, will try and tell you what the Camp Fire and Girl Scout programs are doing along the line of health work in Detroit and how we are doing it.

Some one has asked me how and why I speak for both Camp Fire and Girl Scouts, and I thought it would be explanatory as well as interesting to you to know that Detroit is unique in that we operate under a Joint Council that is

financed by our Community Union. This Joint Council is made up of representatives from each group, together with women who are interested in different phases of girls' work throughout the city. Its object is to stimulate a friendly cooperation that will bring out the best in each program, discourage unhealthy rivalry, which is not only unhealthy to the program but to the girls, and to stand as a link between the programs and the public. We believe that only in this way can these parallel organizations, with the same objective, succeed and have the cooperation from the public that is necessary for their success and which they so richly deserve.

The Council takes care of the business of the joint organization while two trained workers direct the activities. As I have explained many times before, they are housed in the same office, using the same office force, and are trying to do the same things for girls in almost the same way. It is simply a joining together in this Joint Council of the programs that are working with girls in character building.

No doubt, most of you are more or less familiar with the Camp Fire and Girl Scout programs. Mr. Hoover, for instance, whose wife is loved by every Girl Scout in the country, as she is their national president. However, for the benefit of those who are not familiar with the work, I would like to say that they are leisure time activity programs and take in the girls from eleven to eighteen years of age.

We recognize that the school, home and church have first claim on the girl, and all we ask for is her leisure time. It is in the leisure hours that habits are formed that either make or mar the man or woman. I do not remember who said, "You tell me what a man does with his leisure time and I will tell you what kind of man he is." I say, Give the boy the right kind of things to do in his leisure time, and you can make the kind of a man you want him to be. The same thing applies to girls, therefore the importance of leisure time activities.

These programs do not supplant in any way, but aim to supplement and link up in an interesting fashion with the community and everyday living, that which the school, home and church are teaching, and to help the girls to develop into beautiful womanhood, mentally, morally and physically. They are taught to appreciate the highest values in life, and that health is one of the highest values. It is so important a part and is linked so closely with the entire program that constant stress is laid upon it.

"Work, Health and Love" is the foundation for the Camp Fire program, and "Hold on to Health" is one of the seven laws. The ideal, all-round Girl Scout or Golden Eaglet must have good health as well as other qualifications to have that much prized honor bestowed upon her, and her trim uniform certainly calls for perfect posture. No one ever slouches in a uniform. The program teaches them that their body is a sacred thing and that it is their duty to properly care for it. And then, too, very early they learn that good health is something they must have if they are to enjoy to the full, the activities such as summer camp, hiking, field meets, etc. The love of outdoor life is stimulated and health is the result of it. Much of the work is planned for out-of-doors: the hikes by which the day is made interesting through the study of nature lore, and the fun of cooking over an open fire; and then an occasional all night hike with the thrill of rolling up in a poncho and sleeping out under the stars. Then, too, there is the summer camp, which nothing in the world can take the place of, either in the eyes of the girl or for a health education program. Right here, I would like to

make a plea for summer camps for girls, especially the ones that can be operated on a charge of \$5 or \$6 a week.

Detroit is happy to report the opening of an all summer Camp Fire Camp this summer, filled to capacity, with a turnover of six hundred and thirty-five girls at a rate of \$6 per week; and also a two weeks' Girl Scout Camp with an enrollment of three hundred girls at the Detroit Recreation Camp.

We all know that recognition of effort and attainment is an incentive to do more, and so systems of honor and merit badges are arranged for the accomplishing of certain things, thus making more interesting the simple and modest things of daily life. I hear some one say, "Must children always be jollied into doing something they ought to do as a matter of course?" But whether we are four or forty, the situation is the same. When we have done something we think is rather good, a word of praise and appreciation is very welcome, and it inspires us to go on and accomplish something else. The using of the honors and merit badges is more helpful than you can imagine unless you are familiar with such a program. Health education in the school, as well as I, can teach Ellen it is necessary to sleep with bedroom windows open. But is Ellen, who is twelve years of age and ten pounds overweight, interested in why she should sleep with opened windows? She is not. But she is interested in the honor bead which she will add to her string when she has slept with open windows for two months, and will do so with the rain pouring in to get that bead, and then will repeat the process to get another one, until a fixed habit is formed, which, after all, is what we are after—the establishing of fixed habits.

I do not know just how successful the health education teachers in the schools have found the health charts, or if they are using them at all. But our girls are urged to keep them, and many do so, looking forward, no doubt, to the medals of merit or honor badges they will receive, but, nevertheless, forming good health habits.

Good Health is the rightful heritage of every child and that heritage is often destroyed during infancy. We know that the girls of today are the mothers of tomorrow and so our programs have provided a course in child care. These courses are given by a graduate nurse and include proper clothing, bathing and feeding. Just now our girls are making layettes for the Needlework Guild of America, putting into practical use the sewing that is taught in the schools, being given the opportunity to taste of the joy of service for others, and learning how to clothe the coming generation.

I do not think it necessary, nor have I the time, to go over each item or requirement the keeping of which is necessary to win honors, but the list embodies all fundamental laws of personal hygiene, including being free from colds, or absence from school on account of headaches or ill health for a given period of time. In fact, cleanliness, plenty of outdoor exercise, a proper amount of sleep, and no eating between meals are habits which the programs insist upon.

We are creatures of habit, and habit is the basis of health. Let us then be creatures of good health habits, which, with the proper training, can readily be formed in children.

A. D. Jamieson, Secretary and Scout Executive, Detroit Council, Detroit, Mich.: I merely wish to make two statements about the relationship between the Boy Scout program and the health program. First, there is a very definite point of contact between the program of the Boy Scouts of America and every

ago, was then already badly bent. They lived in that badly bent environment ten and twelve years, respectively. Feeble-mindedness of the mother and shiftlessness of the father, poverty, neglect, bad housing, poor sanitation—all these appear in their social history. When they came, at last, to the care of the children's agencies, the general routine examination disclosed one positive for syphilis, the other with a paralyzed arm, a souvenir of infantile paralysis, both infected with incipient tuberculosis, both with a variety of minor physical defects. From the date of that examination, the following health resources have been marshalled to the service of X: Children's Free Hospital, Department of Health Venereal Clinic, University Hospital, Ann Arbor, two specialists in private practice, Board of Health Tuberculosis Clinic, a dental clinic, an eye specialist in private practice, St. Mary's Clinic, St. Mary's Hospital, and the Wayne County Psychopathic Clinic.

For the service of Y have been enlisted St. Mary's Clinic, Board of Health Tuberculosis Clinic, dental clinic, two specialists in private practice, Sigma Gamma Clinic, St. Mary's Hospital and the Wayne County Psychopathic Clinic.

I caution you against the thought that this meant a "shopping around" with the children—nothing of the sort. During the two years, these children have been under the attention of the same nurses of the agency staff, and the enlistment of each new agency was under the recommendation of a previously interested agency or physician, and each newly interested agency has had a detailed history of the children up to date.

What is the result? The appropriate health agencies have corrected all minor physical defects and they continue to attack the serious defects with increasingly favorable prognoses.

To cite another instance, the Children's Agency each summer selects its incipient and suspicious tuberculosis patients and its undernourished children and sends them upon invitation of the City Board of Health to the Preventorium at Northville for eight weeks of intensive attention to nutrition and reduction of underweight. And then an instance from the other side of the field. There is the case of A, a little boy who suffers with arthritis, who has never walked nor ever will, who lies always on his back, unable to do a solitary thing for himself. Everything that science could do for him, for instance, at the Children's Free Hospital and the University Hospital, having failed, it became necessary to make a plan for the short years of life before him. He cannot be cured; his case is hopeless. Well, what was done? He

**SOME OF THE NEWER ASPECTS OF HEALTH INSPECTION
OF SCHOOL CHILDREN**

Round Table

PROFESSOR C. M. ELLIOTT, Detroit Teachers' College, Detroit, Mich., Presiding

SOME OF THE NEWER ASPECTS OF HEALTH INSPECTION OF SCHOOL CHILDREN

DISCUSSION

Professor Elliott: This session of the American Child Health Association is scheduled as a round table discussion on the subject, "Some of the Newer Aspects of Health Inspection of School Children." We wish to have this in a very true sense a round table discussion. That is, we do not intend to make any set speeches or read any papers. All we propose to do is to place before you a plan that has been worked out in the schools of Detroit in the last few years, and get your reaction to it. We should like to have just as free a criticism and just as open a discussion of this plan as it may be possible to have. It may be quite possible that some of you have other views, newer methods of school inspection you would like to introduce. Remember at any time you may feel free to do that. I am going to call on Dr. Carl E. Buck, Epidemiologist, Department of Health, Detroit, Michigan, for the point of view of the Health department.

Dr. Carl E. Buck, Epidemiologist, Department of Health, Detroit, Mich.: I am only going to take about two minutes of your time to set the ball rolling on this subject. For the past few years we have been very much interested in Detroit in trying to determine just what part the teacher could play in school health work. We, in common with others, have decided that the regular grade room teacher must be responsible for the health instruction in the elementary schools. We have already found that she may be of great assistance to us in determining, to some extent, the physical condition of her pupils, through complete health inspection.

It is the function of the teacher, in such health inspection, merely to separate the abnormals from the normals, referring for medical examination all those whom she thinks abnormal. By no stretch of the imagination should such a program be construed as an attempt to make of the teacher a diagnostician. If the teacher can with a fair degree of accuracy separate the normals from the abnormals, two objects will be accomplished:

1. The necessity for examining normal children will be avoided and the physician may devote his entire attention to those children who most need it, the abnormals. Furthermore, the average large city with its present medical personnel finds it impossible to examine all its school children every year or even every other year. Under a program of teacher health inspection the present medical personnel could annually examine all school children who needed attention.

2. The teacher will through these health inspections, have a knowledge of the physical condition of her children, which will enable her to give more intelligently the health instruction for which she is to be responsible, and make her better able to deal with the problems of the individual child. She will know and understand the relationship between the mental and physical condition of the child. We feel very strongly that the benefit which will accrue to the teacher in making her a better health teacher and booster is by far the most important feature of the plan.

During the past year or two we have conducted experiments covering about twenty-five schools or a total of about 20,000 children. All these children have been health inspected by teachers. The teacher has covered all the points regularly

included in the medical examination, except heart and lungs, for which we admit the physician will always have to be responsible. Without going into detail concerning the actual statistics and figures involved, our experience leads us to believe that she can, with a fair degree of accuracy, separate the normals from the abnormals, and have found that with even our present medical personnel, which is not large, we can go over all those children who are referred to us for medical examination. This is, of course, a very brief outline of the plan. We hope that all of you will enter into a very frank discussion of the subject.

Frank Cody, Superintendent of Schools, Detroit, Mich.: I presume you are interested in the reaction the superintendent gets on the subject of health inspection in the public schools. My personal experience in this respect has been very pleasant.

I wish to say to you who are not teachers in Detroit that, through the Health Department, we have developed an excellent system of cooperation. It has been wise, I think, to train the teacher for this particular work. We are starting in the right place. I am sure the city of Detroit is delighted. These classes are voluntary, and we are endeavoring in every way possible to encourage teachers to enter the classes. We are not asking the cooperation of the Health Department, we have it.

I wish to pay my respects to this splendid organization that is not only doing great work nationally, but is doing so much in the cities to stimulate, not only the school officials, but the teachers in this important work.

A Delegate: Will Dr. Buck tell us how he feels about the training of teachers—just how much training is necessary?

Dr. Buck: Eventually, should the plan prove feasible, we should hope to have the necessary instruction included in the regular normal school training. At the present time the amount of instruction given is very meagre. We spend only about an hour in instructing the teacher how to conduct this sort of inspection. This does not mean that she, herself, does not spend more time than that. A short talk is given, usually by Professor Elliott, setting forth the educational advantages of such a program, which is followed by a clinical demonstration by one of our physicians, covering all the points upon which inspection is asked. The whole time for the talk and clinical demonstration is usually about an hour and a quarter. As you can readily see, this is a decidedly makeshift arrangement. In view of the very limited training which the teacher had, we were very well pleased with the results accomplished last year and the year before. We found that her percentage of error, based on the type of examination conducted here, was only 19, an inconsiderable error as compared with the present error of 60 or 70 per cent made through the inability of our present medical staff to examine annually more than 30 or 40 per cent of the children. When we consider that the teacher had only one hour's instruction and that this was her first attempt at this type of work, her showing was all the more noteworthy.

Professor Elliott: At the same time, basing that on 100 per cent accuracy on the part of the doctor.

Dr. T. D. Wood, New York City: May I ask what percentage the teacher found were normal?

Dr. Buck: Less than 60 per cent were referred to us—43 per cent were regarded as normal by the teacher.

Dr. Wood: Who makes the daily inspection of the pupils to determine which of the pupils should come to school—which should be excluded, or returned to the home?

Dr. Buck: That is somewhat a divided responsibility here. The teacher is asked to look over her pupils each day, for possible signs of communicable disease. The school nurse in her daily clinic must see all children returning to school after illness. She also sees any other children referred by principal or teacher and excludes any who have symptoms suspicious of communicable disease.

Mr. Courtenay Dinwiddie, New York: Are those rated as normal by the teacher later examined by the physician?

Dr. Buck: Yes. Since the plan is still in the experimental stage, both normals and abnormals are examined by the physicians. A true cross section of each teacher's work is made, including both normals and abnormals. Of the 20,000 children inspected by the teachers, the cross sections done by physicians represented between six and seven thousand. Should this program be included as a regular part of school inspection, the plan would be to have the physician examine only the abnormals.

Dr. Wood: Did the teachers find more normal or more abnormal than the doctor?

Dr. Buck: In the first year the teacher found a good many more abnormals than the physician. Last year there was not so great a difference of opinion. This year the physician and the teacher were only about 5 per cent apart on the defects found.

Mr. Dinwiddie: What is the work of the school nurse in respect to this particular problem?

Dr. Buck: She plays no part in the inspection or the medical examination except to keep records and to see that the children are kept in order. She does do all the follow-up work for the correction of physical defects.

Mr. Dinwiddie: Does the nurse do any follow-up work before the physician examines?

Dr. Buck: No, she does not. The physician checks the work of the teacher before the nurse makes any home calls for the correction of physical defects.

Mr. Dinwiddie: I mean as routine. I did not mean checking the work of the teacher.

Dr. Buck: No, the nurse does no follow-up work until a condition has been diagnosed by a physician.

Dr. Wood: What is done about the examination for posture, feet, arches?

Professor Elliott: That comes in the orthopedic work.

Dr. Buck: In the ordinary routine medical inspection we do not get defects of the feet corrected—since the child's shoes are not removed. We do examine for other orthopedic conditions. Slight defects which do not need immediate attention are referred to the Board of Education Corrective Exercise Department and the children are put in appropriate classes. The feet of all children taking gymnastics (and this includes most of the children) are examined by the physical education teacher.

Dr. Wood: Are they further examined? If so, by whom?

Dr. Buck: That depends upon the condition. If they are marked as having defective conditions demanding medical attention, they would be referred to private physicians, clinics, or hospitals. If there are slight defects which do not need immediate medical attention, which perhaps could be benefited by corrective exercise, they are referred to the department of corrective exercise.

Dr. Wood: Who determines to which class the child belongs?

Dr. Buck: The physician who made the original examination.

A Delegate: May I ask who makes that examination for postural defects?

Dr. Buck: The teacher includes postural defects in her inspection and the physician as a matter of routine includes it in his examination. The fact that clothing is not always removed greatly impairs the efficiency of this part of the examination.

A Delegate: How much time does the teacher spend on inspection?

Professor Elliott: I suppose we should be perfectly safe in saying that for fifty children, about three or four hours are spent in examination.

Dr. Wood: May I ask, is school instruction suspended for that period?

Professor Elliott: That depends somewhat upon the school.

Dr. Wood: Does the examination include the weighing and measuring of the child?

Dr. Buck: The weighing and measuring of all children, in both public and parochial schools, is done each fall by the teachers. Weights and heights are entered on the child's Physical Record Card. A separate listing is made of all those who are 15 per cent or more underweight.

Professor Elliott: I might just add in this connection, weighing becomes very popular, especially with the children. The teacher not only weighs the children, but the children themselves become interested and weigh themselves. A child may be weighed a good many times in the year.

A Delegate: Just when is this school examination made—the first day of school, or later?

Dr. Buck: This teacher plan of health inspection, as I said a moment ago, is entirely in the experimental stage. Schools volunteer and do the work at any time during the school year. Should teacher health inspections become a part of the regular program, a definite time would, of course, be set aside for this work.

A Delegate: What, if any, provision is made for the exclusion of children with communicable disease?

Dr. Buck: At the beginning of the school year, the first few days are spent by nurses in making room examinations, and any child suspected of having a communicable condition is sent home. Later the child is seen at home by one of the Health Department's diagnosticians. Nurses hold daily school clinics, one function of which is the exclusion of children with symptoms suspicious of communicable disease.

A Delegate: In the selected group examined by the physician, is the clothing removed?

Dr. Buck: There is no rule on this point. In some schools clothing is removed to the waist, in others there is nothing more than the loosening of clothing.

A Delegate: Do these teachers' health inspections extend to the high school?

Dr. Buck: The health education teachers have, this fall, made health inspections of all their pupils in the intermediate and high schools. Their work is being checked by the physicians but definite figures are not as yet available.

A Delegate: How many times during the school year is each grade inspected by the teacher, the first, or second, or third grade?

Dr. Buck: I don't know that I can answer that question definitely. The teachers are instructed to look each day for suspicious symptoms of communicable disease and to refer all such children to the nurse. A complete health inspection is given but once a year.

A Delegate: Where are the official records kept—in the class room?

Dr. Buck: They are kept in several different places. One is kept in the class room, another kept in the principal's room, and another in the office of the Health Department.

A Delegate: How much of the history blank does the teacher use in filling out this health examination?

Dr. Buck: That is a little bit hard to explain without having the form before you. Our form is divided into two columns for each grade, beginning with the kindergarten. One of the columns, for the appropriate grade, is used by the teacher for her markings, and the other column directly to the right, is used by the physician. As a matter of fact the physician does not do any marking. The nurse does the recording.

A Delegate: When the doctor classifies a child as defective, for correction, and sent home for correction, who is responsible for the follow-up?

Dr. Buck: At present the nurse is solely responsible for the follow-up work. We have high hopes for the help which the teacher will give in the matter of obtaining corrections, after she has made health inspections. If, for example, the teacher sees a condition which is later diagnosed by the physician as a definite defect, she is much more likely to talk to that child concerning the correction of the condition than if she had never seen the condition herself. She is even more apt to urge correction for those children in whom physical condition and school progress seem to be related. We already know of many instances in which corrections have been made as a result of the teacher's personal interest.

A Delegate: What percentage of corrections do they get?

Dr. Buck: I do not believe that anyone can really answer that question. However, we expect to be able to answer it definitely in two years. The reason for our inability to truthfully answer the question is this. Most communities check the total number of corrections tabulated in any year against that same year's recommendations or defects and express the result as a certain percentage of corrections. Obviously this is not at all a true percentage of corrections. In Detroit we are checking all corrections with the original recommendations upon which they were made. We have found that, of a rather imposing number of corrections, only a small percentage were made upon recommendations of that year,

most of them resulting from recommendations made in previous years. It sometimes takes as long as two years to get a correction. We therefore cannot say, with any degree of accuracy, what has been accomplished as a result of last year's work until two years from now.

A Delegate: You do not accept the teachers' findings until corroborated by the physician?

Dr. Buck: No. In the high schools, where we have no nurses, the written notice, sent after the physician has checked the teacher's work, will be supplemented by personal talks between the health education teacher and the pupil.

A Delegate: How do the physicians feel about the teachers taking over their job?

Dr. Buck: I do not think the physicians feel at all that the teachers are taking away their jobs. It makes more work for them, because we are going to refer many more defects for correction by private physicians. Our only object in all this work is to get the children to a physician. The great majority of corrections will have to be made, as they should be, by private physicians.

A Delegate: Is this physical inspection made compulsory by the School Board?

Dr. Buck: No, it is purely in the experimental stage at the present time. The plan is, however, looked upon with favor by both the Board of Education and the Board of Health.

Professor Elliott: May I read just at this point a letter I received from one of the principals the other day?

"May I add a few words regarding this work which will give you my point of view? One might think that teachers would approach and carry on this sort of work with a feeling of aversion or half-hearted interest, as adding only one more time absorbing and record making task to their duties—a matter about which they possessed little definite knowledge, and therefore one that might better be carried on by such experts as physicians and nurses.

"I find that just the reverse of this attitude is aroused in the teachers. They seem almost to have derived a pleasure, I am tempted to say, from the experience. First, because they have a new tool which may partially solve the difficulties of those children who are their personal problems, as well as promote the welfare and progress generally of the children under their care. Second, they have gained a sense of added power or ability to control adverse conditions, or, at least, materially aid in their control. This realization always produces the emotion of pleasure and optimism in any normal human being. Their attitude toward the physically handicapped children is much more sympathetic, and a strong desire is aroused to see some measures of relief applied, because of their having made the preliminary examination and detection of the defect, thus giving them a sort of original interest in each individual case. Under the old plan the teacher was not present during the inspection as carried on by the physicians. Only a card with a mark came to her and the nurse was expected to follow up the cases needing attention. Thus the teacher was out of it, as it were, and seldom forced her personal influence and efforts into these cases.

"We have recently completed the work of health inspection as outlined for the teachers, and while it necessarily interrupts the regular routine of

classes, and means additional time and work by the teachers, their attitude toward it was most favorable. They are already reporting several cases in which they are securing immediate cooperation from the homes."

I wish to emphasize one point particularly. We find that these teachers, after having taken part in this health inspection work, become directly interested in the health correction. We have no standards, as Dr. Buck told you, to measure just what the effect will be on the number of corrections, but I personally know of teachers who have followed up cases and have gotten corrections in considerable numbers. One teacher told me that in her class room in school there were sixteen cases of bad tonsils reported. Out of the sixteen only three or four were corrected. The next year there was an examination and some eighteen were found in the room. In the course of four or five months she reported she had fourteen of these cases corrected, by following them up in the homes themselves and insisting that the parents have corrections of these cases. The teacher always has an advantage over the nurse or doctor in this respect, because she can approach the parent from the standpoint of the teacher. If the teacher goes into the home and says, "John is not getting along because of bad tonsils," she has a leverage which a card sent home in the regular manner would not have. Parents listen to the teacher.

Dr. Edith B. Lowry, U. S. Public Health Service, St. Charles, Ill.: I want to congratulate Detroit upon its unusually bright teachers, and unusually healthy children, because the conditions in Detroit evidently are quite different from what I have found in other parts of the country. During the past few years I have traveled in a number of states and have come in contact with several hundred teachers, and I must say that Detroit teachers must be much brighter than the average if they can make health inspections with an hour's preparation. I feel that I can talk, not only from the standpoint of the physician, but from that of teacher and nurse, because before I was a physician, I was a teacher. I had six years in a public school; I am a graduate nurse and have worked in public health work quite a number of years. My experience has been that teachers are intensely interested in health, but they are not willing to attempt what they are not prepared to do. A good teacher is not willing to do something she is not prepared to do any more than a good nurse is willing to go in as a school nurse until she has had special training in public health work; and the physician in general practice is not willing to be classed as a public health physician until he has had special training. I do think teachers can make a good many of these inspections, but they should be prepared for it first. My experience has not been the same as that in Detroit. I checked up on three thousand children last spring in an American community above the average—no foreign people—and I found that only 92 came up to our standard out of three thousand children on the first examination, but after a month's work, a great many more did so. But I do think the corrections we were able to obtain were due to the cooperation of the teachers. I had unusual cooperation in that town. I met with the principals and explained what we were going to do and they took it up with the individual teachers. The teachers had no objection, and cooperated in every way but the teachers are not willing to do that for which they are not prepared.

Professor Elliott: We have at present this afternoon several principals of schools who have carried on this work. I would like to have Dr. Wilson, County physician in charge of health inspection of the schools of Wayne County, tell you something about the rural schools of the county.

Dr. Wilson: In Wayne County, we are endeavoring to follow the same general plan that Dr. Buck has outlined to you as being the Detroit program. In the beginning we had physical examinations of the children to classify them as well nourished and malnourished for the nutrition classes which Miss Church has organized in the county. Later her classes were extended so that she gives instruction directly to the teacher, and then supervises the instruction given by the teacher to the children. Some of the schools require that the teachers have Miss Church's course in nutrition or its equivalent before they are employed. Miss Church has some letters here, one from Mr. C. J. Miller, Superintendent of Ecorse Public Schools, Ecorse, Michigan, which says:

"The nutrition work that is being carried on in the Ecorse Public Schools, under the supervision of Miss Church, County Nutrition Worker, meets with the general approval of the teachers and also the patrons of the district.

"The full value of this work in our schools cannot be properly measured in so short a time. Several of my teachers are not qualified to carry on the work as outlined in the course of study and as required by the supervisor. This situation is largely due to inefficient training in the schools, in the particular subject, for the teacher. While we have the hearty cooperation of all the teachers who are required to teach this work, I am well satisfied that the teachers who have taken and are taking the nutrition course are doing superior teaching and getting much better results in this important subject with the boys and girls under their supervision.

"For the short time we have offered this special course in our schools, under the excellent supervision of Miss Church, I am well satisfied to state that nutrition work will continue in the first six grades and teachers who take a special course in this work will be encouraged to take positions in the Ecorse Public Schools."

Mr. Harvey H. Lowrey, Superintendent of the Springwells Schools, Springwells, Michigan, also writes favorably, as does Mr. McDonald, of the River Rouge Public Schools, who speaks particularly well of the nutrition course. Mr. Miller requires that his teachers have this course during the first year. Miss Church's course is given at various schools, and full credit is allowed in Detroit Teachers' College and Ypsilanti State Normal College. The teachers volunteer to inspect their children and we therefore have their cooperation. However, I have examined all the children regardless of whether or not the teacher has inspected them. My examination is also on the same general plan as the examinations in the schools of Detroit. So far as the reaction of the teachers is concerned, it has been entirely satisfactory and favorable. There have been a few teachers, perhaps, who object to the amount of work but, in general, they are very much in favor of the proposition.

I have found quite a number of cases of children with defective hearing and vision, and diseased tonsils, which were called to the teacher's attention, by the fact that she actually saw them and did the work. And where teachers were especially interested, I brought them into the examination room and showed them where they differed from me. We found some cases of mental defects in which the teacher was very glad to get information. One teacher was not at the County Institute when the instruction to teachers was given. Her examinations did not check with mine very well and I felt that she did not have the correct idea. I talked with her and afterwards she brought children to clinics in Detroit each Saturday in her own automobile and had a large number of corrections made. I think this year she will have even better results.

Probably the most important aspect of our work was the increased interest on the part of the parents, even where they had to come several miles.

As to the teachers' ability to do this work, I might mention the general plan of instruction. They came to the County Teachers' Institute at the beginning of the school year. Professor Elliott explained the work done in Detroit, and they were given the demonstration spoken of by Dr. Buck, and were told the work expected of them. They went home and studied the whole course, with such assistance as the school nurses could give them. Mr. Granger, of the Tuberculosis Society, has figures for our examinations and has checked up on some of them. I am sorry I have not those figures, but I can say that most of the teachers were able to do the work quite efficiently. I may probably say that the examination itself was not of great value, but most of the teachers found, in a general way, the defects that were present in their children. The fact that fourteen, I think, of the teachers who volunteered last year, are also desirous of doing the work again would indicate that the teachers were satisfied and wanted to carry it on.

Our plan is to cover the children in the county twice in their school life, when they enter school, and then again about the fifth grade, and in addition to that, all the pupils sent by the teacher.

Professor Elliott: When we began the work in inspection, we began it just as an experiment and carried it on as an experiment. We felt that having the teachers do this sort of work would not entail any danger to the children whatever, because any child selected by the teacher as defective was afterwards checked up by the physician. The teacher does not attempt to prescribe any treatment for the case. We felt that, if we might be able to do some good, it was worth while. We find the teacher in the Detroit Schools, with only a limited amount of training is able to do that work. If our Commissioner of Health, the superintendent of schools, and others in administrative authority in the city decide the work is worth while, we have accomplished something that would not otherwise have been accomplished and the effort has not been wasted.

Dr. Buck: I heartily agree with Dr. Lowry that we ought to provide adequate instruction before we take this over as a regular part of the school program, but it seems to me that we ought to go through this experimental stage, trying the teachers out with the casual amount of instruction we are able to give them now, before we attempt to incorporate the training in the normal school. We will have to show that there is a demand for this sort of training before we can expect the normal school to give it.

A Delegate: Do you require a doctor's certificate after children have been out for three days?

Dr. Buck: No, we do not require a doctor's certificate unless the child has been out with communicable disease. The child is not re-admitted until examined by the nurse. The child cannot return to the class room unless in the opinion of the nurse, he is entirely recovered.

Dr. G. L. Timanus, Supervisor of Health Service, Playground Athletic League, Baltimore: In one of the public schools of Baltimore County where I made the medical examination of about five hundred children, it was possible for me to give a health button to only one who had no correctable defects and was properly caring for his health.

The teacher of this child was very much pleased and asked me what she might do to better the condition of the children in her class. I suggested that as 90 per cent of all school children examined had defective teeth, it would be well for her to question the children about the care of their teeth each morning and make frequent inspections.

The next year I was able to distribute twenty buttons to the children in that school and later learned that practically all of these had been given to children in this particular teacher's room. Such results can easily be obtained when the teacher is interested in the health problems of her pupils.

A Delegate: Were those children checked up by a dentist?

Dr. Timanus: No, they were not checked up by a dentist. I have had much experience and use my own standard for grading.

HOW TO CREATE AND FINANCE A NEW ORGANIZATION

Round Table Discussion

FRED M. BUTZEL, Attorney-at-Law, Detroit, Mich., Presiding

HOW TO CREATE AND FINANCE A NEW ORGANIZATION

DISCUSSION

Mr. Butzel: Our program does not say what kind of organization is to be financed. I presume it has to do especially with a child health program, and whether this is a legitimate matter for financing may be a good question for discussion. Nationally and locally, we have child health programs and adult health programs, we have tuberculosis associations, cancer research associations, associations for social hygiene, public health associations.

The association convening here in Detroit has shown a splendid example in combining two organizations dealing with child health. Should combination proceed further? Of course, to accomplish work, both research and propaganda, takes money and anything that has to do with children has a special appeal, but sometimes I feel that it is not fair that the sentimental interest in childhood should so absorb public interest that the aged and infirm may be neglected, that chronic diseases may be overlooked and important objects of less sentimental importance be neglected. Should not the interest in childhood be used as a feeder for the other interests, and especially should not the interest in child health be used as a means for financing a broader health movement?

Again, it is quite possible that the interest in tuberculosis, cancer, and social hygiene has flowered in the tremendous interest in preventive medicine and public health.

The Chair does not, however, wish to control the discussion, and any remarks on publicity, organization and financing of the health movement for children, whether by itself or in conjunction with other movements, are in order.

Mrs. Julia George, San Francisco, Calif.: Is this discussion in connection with the local work of this organization and does it tend toward possibly organizing groups in different localities? Is it to be an extension of this national organization?

Mr. Butzel: I understand this meeting is to discuss the financing of child health work in general and has absolutely no relation to the national organization. The national organization is not looking for financial assistance at all; it is looking for the extension of the child welfare work.

Mrs. George: In many states, California for instance, we have a great deal of child health work already established. Now, that needs perfection and extension. Any new group could not organize itself. A community chest idea is growing and that of course will help in time. The financing is going to be done in that way.

Mr. Butzel: Are your figures from your California experience with child health itself? That is a proper subject for a community organization of social work.

Mrs. George: It is part of a community organization.

Mr. Butzel: Child health as such, that is what I am getting at. We have tuberculosis as a subject, we have feeble-mindedness, primary schools, the education of the pre-school child, because we have money given for these purposes. We are dealing here with child health by itself, and if you will discuss that subject, that is

what we want. I think that is fundamental to our entire subject and I think we should like to have our ideas clarified.

Mr. Hixson, Oklahoma Public Health Association: The school authorities in Oklahoma certainly are not imbued with the idea that they have any responsibility to the child before it reaches six or seven years of age, or gets into school. I do not doubt, in fact I know, that in some of the more progressive states—and we are glad to recognize that California is to be classed among the more progressive states—a feeling of responsibility for the pre-school child is felt by Boards of Education. Perhaps because my approach to public health problems is from the tuberculosis angle, I have always maintained that since this is an age of specialties, we cannot get very far without specialization. This would justify an organization for specializing in child health.

The fact that the death rate from tuberculosis, since we began our activities in 1904, has been cut in half I think will justify the contention. I do not mean to say that I believe it justifies a multiplicity of community agencies but rather I think we need more specialized departments of existing agencies. I am the managing director of our state public health organization. In this capacity I have recommended to the Board of Directors and secured their approval of affiliation with a number of the National Organizations and the establishment of departments of your Association to prosecute vigorous campaigns. We have had for some time what we might term a department of Child Hygiene and another of Public Health Nursing. We have just organized a new department, that of Cancer Control. We are preparing to organize a department of Mental Hygiene and one of Nutrition.

The Oklahoma Public Health Association believes that it is through specialized departments of one centralized volunteer public health agency that we are going to achieve the best results.

Mrs. George: That is not in the State Board of Health?

Mr. Hixson: No, that is from the standpoint of primary philanthropy. The State Board of Health did secure from the last legislature appropriations to match the Sheppard-Towner act. Without the preliminary work which had been done by our Association in previous years, this appropriation might have been forthcoming but we believe it was largely because we had prepared the public to evaluate child hygiene activities. Our local county and city associations are continuing to give a good deal of attention to child welfare and prenatal clinics. But so far as the state organization is concerned, we are now attempting very little along this line and are directing our efforts towards doing things which are not being done by governmental agencies within our state. While there are three tuberculosis sanatoria for civilians and one for soldiers, maintained by the state under the supervision of the State Commissioner of Health, there is no department of tuberculosis nor is there a department of public health nursing.

So I feel that it is not so important to create new organizations as it is departments within existing organizations.

Mr. Butzel: I like to compliment you on your splendid progress. I think you have the proper idea. I think the health association, rather than the child health association and the community tuberculosis or cancer control—the health association should visualize health for all people. But a main objective is the one thing which is worth while organizing for, unless you have a particular test or

local condition that requires concentrated effort. We haven't that here, but I wish we had. You take for instance the community chests. You follow their literature and their propaganda and it works out just as the survey does. It works for industry, health, recreation, and for the great elemental activities.

Ella Phillips Crandall, American Child Health Association, New York: Miss Stack represents the State Department of Health in Connecticut, the Bureau of Public Health Nursing. It has had to do with child hygiene. I would like her to tell us some things, because she has done much organizing of local communities in behalf of maternal and infant protection.

Miss Margaret K. Stack, R. N., Hartford, Conn.: What I have done is to get public health nursing associations organized and have the organizations raise money to finance the work. We found we could not organize for specialized nursing, or rather we found the people not interested to finance a specialized public health nursing service. Our response in Connecticut to a general public health nursing service rather indicates the desire of the people at least. I feel that a specialized nurse is handicapped in the development of her program unless there be other public health nurses to do the things the specialist does not do, but which are in reality a vital part of the whole work.

While I was on my vacation this summer I attended one of the baby conferences which is conducted by a State Department of Health, and the people in the small town, knowing that I am doing public health nursing in Connecticut, asked me about it. Ever so many remarked about the public health nurse but said she was not doing the things I mentioned, but just taking care of the babies. The work is not being gotten over in that town and the town is not taking advantage of what the state is giving them simply, I feel, because it is a specialized service. The people do not appreciate it or understand what it is all about.

Mr. Butzel: Of course, I suppose much of this specialized work merges into more general organizations eventually, and this justifies the specific organization rather than general organization.

Miss Crandall: Mrs. Robinson represents a community health center in an Italian district. I should like to have her speak.

Mrs. J. C. Robinson, New York City: Judson Health Center is the result of the enthusiasm of one woman, Dr. Eleanor A. Campbell, who financed the thing entirely herself the first year on a very modest scale, with about three workers. Eventually she secured help from two large foundations and a religious organization. The Center has now a combination of support. Several thousand dollars are raised from voluntary private subscriptions.

I am interested in the discussion of specialized service versus more general health service. Dr. Campbell's original idea was to feed babies. She very soon, however, graduated into the idea that you could not do much for babies unless you built up the health of the mothers, particularly in a district such as ours with very large families and very bad conditions for woman. So, she started out with work for babies and mothers, and the pre-school children came along to the baby clinic and had to have attention. Then, you could not do very much for the pre-school children without getting the interest of the older sisters, so that led to some school age work and soon we were giving an all round health service in the district. This is right in line with the principles that you are outlining now.

Mr. Butzel: You have a health center with a geographical limit?

Mrs. Robinson: Yes, we have been assigned six sanitary areas in New York City, for health care.

Miss Crandall: What is your budget?

Mrs. Robinson: This last year it was \$91,000.

Mr. Butzel: That is the way they take care of a big city block in New York, as far as financing is concerned. Now, out in the country can they learn anything from New York? Is it like being on a different planet so far as financing is concerned? Methods can be applied to research, but as far as finances are concerned, New York is entirely unorganizable.

Miss Crandall: As Mr. Butzel says, New York is in no sense a typical city. It has approximately two thousand social welfare agencies; consequently it is no criterion at all in a discussion such as this.

There are many baby health stations, as they are called. Some of these are privately organized and financed but the city maintains a considerable number. I am sorry to say they are very inadequate in number and service. They do not stand at all for the type of thing Mrs. George refers to in the state of California.

Mrs. George: In San Francisco and Los Angeles and one or two other cities, they are very well developed, and as the need arises they can be increased, there is no question about it.

Mr. Butzel: Of course, the civic programs in quickly developing communities are very hard to finance, and sewers, highways, lighting, and even schools, will probably be taken care of before advanced health programs are entertained. It is a question of demand. If New York keeps growing at such a preposterous rate, the elementary necessities are the ones that must be taken care of, and there is great competition between other objectives. It is a good thing, possibly, that health is slighted by the state, because that is a thing that you can supply with private charity. The state has to put in sewers. It is not such an appealing subject.

This institutional work we are in at present is a very interesting way of financing something. For instance, a portion of the Palmer fortune went to a foundation for the teaching of motherhood. The trustees handled the money in a peculiarly wise way. There was a tremendous demand to create a big boarding school on the Palmer property. A number of ladies in Detroit took the matter into court and contended that the property should not be sold; it should be used. It was a delightful place for a selected number of young ladies to be trained in motherhood under agreeable circumstances. Mrs. Palmer named only men in her will, but when women were added to the Board, they sent all over the country for ten or twelve of the best known educators, women who were handling home economics, and dietetics, hygiene and various subjects that had to do with motherhood. They laid out the program which led to this work here. Experiments were made in dietetics and extension work established for teaching feeding and training of infants. Normal school or grade "A" pupils in the last year, in home economics, came here to study on the ground, and lastly a very small kindergarten was established which admits only children from two to five years old for observation purposes. This is all financed by the Foundation. One thing leads to another, and with this complete independence, research, scholarship, scientific information will be the first object. The second object will be to carry the message as it

develops here to all parts of the country. Eventually its effect on the teaching of motherhood will be very great. It is doubtless this result that Mrs. Palmer had in mind. Anyway, that is what is taking place as the money is being used in a foundation rather than an institution.

Mrs. George: If this is a school for motherhood, I do not see how they can run it unless they begin at the beginning as to the responsibilities of motherhood.

Mr. Butzel: They do develop the idea by having these young women from the normal school come here and serve their apprenticeship. These women are potential mothers. As teachers they are actual mothers to a large number of children, and eventually they will go out and teach mothers again. It leads to that eventually. If mothers are trained to bring up their children, I think we are going to go very far in improving the human race, and we do not happen to know that a great many physiological and psychic disturbances find their roots in early childhood.

A Member: I should like to know on what terms the Rockefeller Foundation makes appropriations.

Mrs. Robinson: In our application, we made a straight and bona fide representation of what we had done. We wanted to make a special intensive study of the simplest and best method of combating rickets in congested areas, and asked the Laura Spelman Rockefeller Memorial to help us. We felt that our advisory committee was particularly helpful to us. We secured the interest of four specialists in child care who were interested in the rickets problem. We worked with them quite carefully in outlining our plan and their endorsement undoubtedly was helpful.

Mr. Butzel: After all, you were not financing a health center. You were financing a research project, a specific number of cases of rickets.

Mrs. J. C. Robinson, New York: Yes.

Miss Crandall: Mr. Butzel very logically raises the question as to whether it is more practicable, to attempt to raise funds for child health or welfare activities, or for general health work with special emphasis on child welfare. We have gotten pretty far away from the subject and I think it would be particularly helpful to come back to it and get the opinion of the group on this question.

A Member: In our own work, we have the larger health program. We have clinics for adults and yet in raising money we have found it more necessary to emphasize the children's work. The child welfare work has the appeal. If you help a child, you must help the mother and help the family.

Mr. Butzel: There is no doubt about that. However, what we want is to raise money. Even here in Detroit, with its very fine organization, with its definite attack on the problem of research and organization, with community control and state control, and with deep consciousness of power, for two weeks during a drive for funds an organization will exploit cripples, send them to the city hall and exhibit their deformities. We are doing it knowing it is wrong in a sense, but it is justified in this sense: people will realize that they are contributing to make that sort of thing unnecessary in the future. It is like sacrificing life on the battle field to save life ultimately. A blind person shows himself at work and the people who contribute know definitely they are helping to prevent blindness. We do this sort of thing one day in the entire year. It secures money from the community

ultimately and we have to play to that end. We go to our publicity people that do the soliciting and have them get a child or two from the masses. There are very many rich people who have not had a chance to assist in social problems. We have to work that up. Years ago in Detroit we had a society for the prevention of cruelty to children, and a place called the Home of the Friendless. They are merged today and called the Children's Aid Society. It is proof of the culture of the city that we do not need the old type of name any more, but in those days if you wanted to get money, you showed the cat-o'-nine-tails and instruments of torture used on children, and that was as good a way to get money as there was. In raising money, unless you are going to foundations and very intelligent and wealthy people, you cannot get away from the definite sentimental appeal; but the larger the fund is, the larger the scope, the nearer you can come to the abstract objectives.

Orlo F. King, Infant Welfare Society, Chicago: While we do not have any particular difficulty in raising money, the question I would like to present is this: Is it a wise thing from the standpoint of the community for our various health organizations to solicit funds from these large foundations with the idea of building up large endowments, or, is it not more advisable to look after our five and ten dollar subscriptions with the idea of bringing our influence to bear on people generally, as well as among the poor people?

Mr. Butzel: You have raised an interesting question. The form shows you are biased. If you will elucidate that very fully I will answer it. I do not agree with you.

Mr. King: Personally, I consider one of the big things we are doing is educating the general public as well as the families with which we come in contact in our twenty-seven stations. I think our figures will prove that babies living within districts covered by welfare stations have three or four times as good a chance for life as babies in general in the city of Chicago. When that fact is brought home to the givers, either by letter or by some business man soliciting in person in the offices, and is also brought out in our newspaper publicity, the attention of the people in general is called to the fact that babies in their homes do not have as good opportunities for health as the babies who are getting technical care and training in the welfare clinics.

Mr. Butzel: But why wouldn't you have the same publicity if the Rockefeller foundation were financing it? What has the fact that you get it in five and ten dollar subscriptions, or five and ten thousand dollar contributions, got to do with the publicity?

Mr. King: When people put money into a social service work, they naturally take much more interest in it. And they will read the publicity articles in the papers and elsewhere with a greater interest than if they had not helped to produce the results we tell about in our publicity. It is not the amount of publicity but the results from it that really count.

Mr. Butzel: That is true. Of course, you have placed two things in juxtaposition, haven't you? The cause of infant welfare may be more helped by small amounts from a great number of people and the consequent interest on the part of those people than it would be if you had your money come in in large amounts so that you could buy your publicity and use it as the basis of your propaganda. In the long run, there are two sides to it. I am not sure that this institution here

gets its money all in one amount. We do not go around and solicit five and ten dollars, or a hundred dollars. It is going to be a tremendous center of propaganda on account of the young women who are graduated here, the work done with the children. It is going to add a tremendous amount of publicity and I prophesy in a very few years this type of school will be prevalent all over the country and become a part of the school system. Where we get our money from makes no difference. If we had to go out and beg, borrow and steal small amounts, we should have lost much time in the process. If it comes from the state, we all pay taxes also, which is a significant argument. If you cannot get your money in big sums, your society will have to go and get five and ten dollar amounts to play the other end. Every time somebody gives five dollars, he not only gives himself but he works up much interest. If you can get your money in large sums, if it is given for social purposes and used for infant welfare, it is used pretty well. There is no such thing as tainted money.

A Member: When you go to the Rockefeller, or some other foundation, since it is difficult to raise money for something that you have to demonstrate, they expect, believing in your ideas, to help you start the proposition, but that the public will have to take it over and you will ultimately have to get up your contributors. The other foundations that are not funded to run your work, will not give you an endowment; they will help you start and then you have to get outside contributors interested in the work. To get a thousand people interested with five and ten dollar subscriptions in something that does not exist is impossible. The foundations do help start something new, but then they tell you it is your business to get the public interested and if the public does not believe in it, they won't continue. In fact, it is almost impossible to get money from the Rockefeller foundation except on a descending scale for a limited period of time. Five years is the maximum, very often three.

Miss Crandall: I think that answers the question in part. You do get a running start by the help of a big foundation. However, it is based on the moral obligation to have it financed by the public in general. There is another aspect to this question which has not been touched upon. Dr. Emerson referred to it yesterday afternoon and a luncheon conference was held this noon more specifically to talk about it, and that is, cooperative support for citizens of moderate incomes. A project is being worked out in one small section of New York City among self-supporting families of limited incomes to provide health supervisors for pregnant women, infants and young children, and children of school age, and visiting nurse care for sick people of all ages at a cost of six dollars per year per person. This plan was worked out with great care. It was instituted primarily by the Maternity Center Association of New York, that association recognizing that the care of the mother often necessitated care of her family. It was very carefully estimated that on a basis of five thousand citizens as members of a cooperative health society, paying six dollars per person per year, it would be possible not only to meet all expenses, but to have a small sinking fund at the end of the year. It is often said that the very poor and the very rich have been provided with sickness care, but no provision has been made for the middle classes of which the nation is so largely comprised. Surely little effort has been made so far to teach the average citizen and voter that it takes larger appropriations to do high grade work of this sort. A citizens' society in which members would pay their dues and manage its affairs for a few years, would furnish experience and knowledge on which to base a

publicly supported service. Then people generally would know the value of standardized work and hence the necessity for adequate appropriations. The Manhattan Health Society in New York, a year ago, I should say, had less than a hundred members. It now has nearly five hundred paid up members. Dr. Dublin, of the Metropolitan Life Insurance Company, said sometime ago "it will go like a prairie fire when it once gets caught, but it will have to get caught."

A Member: In a similar community in which I live a similar effort was made. There was not a single physician that could be secured to do the work, because it was not on full time. They could not depend on enough to employ a full time physician, and the medical society turned the thing down as being unethical for a physician to do part time work with any special group of that kind.

Miss Crandall: There are 70 doctors in that small community. Many of them are calling upon the Health Society.

A Member: On a fee basis?

Miss Crandall: Yes, on a fee basis. The doctors are paid so much per hour for their services but they give only a health service, not sickness care. When a person is sick, he is referred to his private physician.

A Member: Do you mean the annual dues are six dollars for the head of the family?

Miss Crandall: Six dollars per person a year. There is a family rate of \$16 a year for a family of three or more. To prove that if such a society got numbers enough, it could be self-supporting, I might mention that there is something of a similar character in Holland of 90,000 members in which the fee is only ten cents a week per person.

SCHOOL HEALTH SUPERVISION

DINNER CONFERENCE

Arranged by the Bureau of Education, Department of the Interior

UNITED STATES BUREAU OF EDUCATION CONFERENCE ON SCHOOL HEALTH SUPERVISION

A dinner conference on school health supervision, called by the United States Commissioner of Education, was held on Tuesday evening, October 16. Dr. Frances Sage Bradley, Director of the Child Hygiene Division of the Arkansas State Department of Health, spoke of the rural school child as the "carrier of health" and pointed out what the rural teacher can do for the health of her pupils. Dr. Arnold Gesell, Professor of Child Hygiene at Yale University, spoke on the subject of the Pre-school Child and the Public School System and emphasized the necessity of bridging the gap between pre-school health work and school health work, and spoke of the desirability of making a closer connection between the child health conservation center and the public school, which he characterized as the two great educational institutions influencing child life.

Miss Elma Rood, Director of Health Education at the Mansfield, Ohio, Child Health Demonstration, spoke on the training of teachers to do health work in rural schools, and described the course in health education which is being given at the county normal school in Richland County.

Dr. William DeKleine, Health Officer of Saginaw, Mich., in charge of school health work in that city, cooperating with two boards of education, spoke of school health supervision in city schools from the viewpoint of the health officer. He conceives of school health supervision as having four divisions—sanitary regulation of school buildings and grounds, control of communicable diseases, the examination, correction and prevention of physical defects, and health education, or the teaching of the fundamentals of healthful living.

There were 178 people present at the conference, from 24 States and 2 foreign countries.

Miss Harriet Wedgwood, Acting Chief of the Division of Physical Education and School Hygiene of the Bureau of Education, presided at the Conference.

The Bureau of Education will publish the papers read at this meeting.

**PROBLEMS IN CHILD HEALTH NURSING IN RURAL
DISTRICTS—HOW TO REACH THE RURAL MOTHER**

Round Table

**LAURIE JEAN REID, B. N., Director, Bureau of Child Welfare, State Board
of Health, Jacksonville, Fla., Presiding**

PROBLEMS IN CHILD HEALTH NURSING IN RURAL DISTRICTS—HOW TO REACH THE RURAL MOTHER

DISCUSSION

Mrs. Reid: The subject assigned for this Round Table conference is "How to Reach the Rural Mother." I am very glad to note, in all the proceedings of the Convention up to this time, that the thought uppermost in the minds of those interested is to get back to the home and the mother with health instruction. We have been gradually, though unintentionally, taking the responsibility of the health of children from the parents and making it the responsibility of the community or district nurse or whatever agency could be induced to undertake health work. I believe that parents resent this air of superior knowledge regarding their children from an outside source. On the other hand, I find that parents are, in the main, eager for instruction and information that will be helpful to them in the matter of the health of their children. Personally, I feel very strongly about the instructive work being done in the home wherever possible. I think I can express myself better by telling you a little story.

A few years ago I happened to be working in an epidemic of smallpox in a community. All of the school children who refused vaccination were sent home with the understanding that they must remain until they had been successfully vaccinated, or until the termination of the epidemic. Two children, a brother and sister, were kept at home and a note sent to the teacher saying that the parents did not believe in vaccination and they would therefore keep the children at home until the time had passed when vaccination would be compulsory. According to regulation, quarantine was instituted. Finally, in a week or so, came a note with the two children, which read something like this: "Dear Teacher: You may have my children vaccinated if it is necessary for them to finish their school term. I am sorry it must be done now because the weather is hot, they are not well, and I am afraid they will get sicker, but realizing that the day of parental freedom in ruling is ended I will submit to governmental authority, trusting Him who is able to deliver. Yours truly, Mary Smith." This last sentence is quite pathetic to me in that the mother had felt that the care of her children had been taken from her. She was their mother, but she was no longer first to them. To my mind; more than ever do we need to place the responsibility for children where it belongs: the mother should be first and health education, wherever possible, should be carried into the home.

I have tried to plan this Round Table so that we may have discussion from every angle whence education can be given a mother and I have been most fortunate in securing for the short talks which will precede the discussions, those who are best qualified to give up-to-the-minute information from actual experience in the work, I am quite sure that Doctor Florence McKay, who is Director of the Division of Maternal and Infant Hygiene of New York, needs no introduction to you. Doctor McKay has many Health Stations for rural New York and will give us the benefit of her experience in reaching the rural mother through the Health Station.

Dr. Florence McKay, Director, Division of Maternal and Infant Hygiene, Albany, N. Y.: Our health stations are called Health Consultations. We go into the rural districts, as many of you do, and hold children's health consultations, or conferences. We feel that in that way, we get in touch with the rural mothers, not only once, but several times. In the first place, an advance agent goes into the town or community where we are to hold a consultation, and organizes a group of mothers who get the other mothers in the town together, or call personally upon the other mothers and make an appointment with them for a consultation regarding their children of pre-school age. The agent leaves a consultation card which is in duplicate, with the address in the middle, and the mother has the time and the place of her child's consultation written out for her, and left with her. On the back of the card we place the beginning of her education by saying: "Keep children well. Do you know that almost all diseases and defects of children can be prevented by proper care and hygiene, or can be treated and cured if discovered early in life?" That is her first introduction to the subject. Then, she brings her child to the children's health consultations and there she gets individual instruction from the nurses, and later on, a letter goes to her from me urging her to go to her doctor for correction of her children's defects. So, she gets another slight contact there.

Then, she goes to her own doctor and gets more or less instruction in hygiene, as the case may be. If she does not go to her own doctor, the local nurse, or one of our own nurses follows up the case and finds out why she has not, and we have another contact there. Then, she is sent to the doctor afterward. So, through our rural children's health consultations, we get into some sort of contact with each mother three times, and often four times before we get entirely well started on a "keep well service," and we hope she will continue it. Of course, a good many do not.

In our prenatal consultations, we have much the same type of organization for getting in touch with the mother, only in that case the mother is reached by a local public health nurse, or one of our own nurses, if there is no public health nurse. The nurse calls in the mother's home, explains to her what we are trying to do and gets the mother to come to the consultation. Then, she has additional contact with the physician at the consultation, with her own physician afterward, if she has one, and with the local public health nurse who does the follow-up work. In that case, also, the mother has the contacts with prenatal consultations which are held every two weeks, or every month, in each locality in which they are started. Those are the two ways we have of reaching mothers in New York State.

Although it is not entirely on the subject, I would like to mention that this summer we tried another way that we have found to be fairly successful, through the county fairs. We tried county fairs for a number of years with various methods and none of them worked. But this summer, we tried a new scheme. We took our layette and baby trays to each county fair. We had a nurse at 44 of them. We had a display in a booth along the main aisle, or some conspicuous place. It worked very well. The mothers stopped and talked and through their talking with the nurse, got a good deal of information and signed cards for our literature or signified their intention of joining mothers' health clubs if they were formed in their community. We discovered that at a county fair you can talk health, or anything else, until you are hoarse, and nobody will listen to you, but if you hang a few baby clothes on the line, people will stop and look and after they stop, you can begin to talk. In that way you will get much more across than if you have nothing for them to look at. In this way, at 44 fairs that we attended this summer, we

reached about 10,000 mothers. About 3,000 of them were of childbearing age. There were 79 personal consultations on prenatal care with the local nurse in charge.

Miss Margaret K. Stack, B. N., Hartford, Conn.: What is your method of knowing that something is done? Does a nurse follow the mother up? Whose responsibility is it to know?

Dr. McKay: We send out our record forms. The local nurse, if there is one, usually wishes to do the follow up work. We allow the mother a month in the first place to have the defect corrected. At the end of the month, the local nurse gets a copy of our report record form, on which are columns to show whether the defect has been corrected, or whether nothing has been done about it. The local nurse takes the record form to a physician and if he has seen the child, he gives the follow-up information. If the child has not been seen, the nurse offers to look up the case if the doctor wishes, which he usually does. If there is no local nurse, or the nurse does not desire to do follow-up work, we send out our own nurse; so we have a record on the follow up work on each child.

Mrs. Henry F. Vaughan, Detroit, Mich.: May I ask Dr. McKay about the number of children they average for examination at their child consultations? I would also like to know something about the attendance at their prenatal consultations, and the extent of their examinations. In Michigan we have some difficulty in getting these conferences started.

Dr. McKay: We allow twenty children a day for each doctor. We always have one doctor, and sometimes two; so we plan to have twenty or forty children, depending on whether we have one or two doctors. So far as our prenatal consultations are concerned, they are very new. We started our first one last September. Last year we held ninety-six consultations in all. They were held separately from the children's consultations. We have steadily increased the attendance. We had 333 new cases last year, and between 125 and 150 later on, so we are having an increasing demand for more consultations in other places.

Dr. Frances S. Bradley, State Board of Health, Ark.: In our state we go into counties only upon the written invitation of the county medical society. As few of these counties have nurses, we are dependent upon these men for checking up the value and extent of our work. We are not in a position yet to pay even a nominal fee for their services, but there is no doubt in my mind that local doctors take a more whole hearted interest in such work when they share in the details and the responsibility of the service. They are continually reporting to us that Mrs. So and So brought in Johnny or Susie for attention to eyes, ears, throats and the like. Even without nurses we find most interesting cases. Two years ago, while I was with the Children's Bureau, a woman brought her two weeks' old baby to the Special for instruction in "getting him started right," for she stated that her other two children while apparently strong and well, had cried continuously, wearing out both themselves and the family. This was a nice baby, and we gave her directions for more systematic habits and for more careful feeding. This year she came to us again with a brand new baby, for more instructions, for she said the little two year old was the only good baby she had had, and she wanted this one to be just like him. She added that she would try to be ready for us again should we come her way in another two years.

To show the interest of parents, I might mention another instance of a county where last year we examined 314 children, and when we returned this fall, 1,125 children were brought in. I am sure that at least 300 of these were last year's applicants returned to see if they were gaining, upon our recommendations.

Mrs. Reid: I think a very good point has been brought out here, in the reaching of your mothers through physicians, because many times women, particularly those in the country places, do not go to their physician during the prenatal period at all. Physicians with whom I have talked tell me that while the patients may be able, financially, to have the services of the physician whenever necessary, they rarely avail themselves of professional advice during the prenatal period. Many times the first intimation the physician has of a woman's condition is his call to attend her in labor, when, of course, it is too late to correct any trouble that may be present, but you see, we are beginning. There is one concrete instance where you can reach the mother through the physician, and if you can make one example in a community, you are sure to get many others in that community from the example of this one.

Mrs. E. R. Weeks, Kansas City, Mo.: May I ask a question? How many colored children did you have among them?

Dr. Bradley: Last year we examined a large number of colored children, but this year we were greatly limited for space and were allowed to take only white children. In our section of the country it is wiser to keep the two races separate and this year there was but one small tent available for the purpose.

Mrs. Reid: In the South, we have white conferences for white children, and colored conferences for colored children and while precisely the same care is given and the same examination made in each instance, the conferences are held on different days, or one in the morning and the other in the afternoon of the same day, but they are always taken care of separately.

Mrs. Vaughan: We have discouraged clinics in connection with county and state fairs this year. It seemed more advisable to urge the introduction of some popular educational health program. Our reason for doing this was that, because of the large number of children presenting themselves for the examinations, the lack of proper quarters and the insufficient personnel, a desirable examination was not possible. With the development of permanent Mother and Baby Health Centers in many communities, the periodical children's conferences, and our traveling child clinic the children would be cared for to some extent. Where conferences are conducted by personnel from the Bureau of Child Hygiene and Public Health Nursing of the Michigan Department of Health, records of examinations are made in triplicate, one of these being sent to the family physician, one to the community nurse and one kept on file in our office. By this means, physicians are supplied with the information they desire.

Mrs. Reid: We must not get away from our subject, which is methods of reaching the mother and particularly the rural mother. I am sure we have been interested in the information regarding the Health Stations. We will now go on to the nursing service, by which I mean the services rendered by nurses and just what they can do toward reaching mothers with health education.

Hazel Wedgwood, State Department of Health, Maryland: I wish to explain what I mean when I talk about rural districts. When I think of rural districts, I think in terms of farms—farms where they have pigs and chickens, where they have gardens, and where the farms are perhaps ten miles apart. I do not include in this category the villages, which present an entirely different problem, though these villages are many times included in a rural district.

The question which I am going to discuss this evening is, How can the nurse reach the rural mother? Almost any nurse with health, an unlimited amount of

energy, and a method of conveyance, can reach the rural mother, but the nurse must be able to interest her in health, in order to get her to practice the measures necessary to promote her own and her family's health, and we need nurses who are capable of much more than just a physical endurance test.

First, I would like to consider the nurse who is going to work in the rural field. What are her motives for undertaking the work? Has she selected it because she has a real understanding of the needs of these rural mothers, and has she an understanding of the possibilities of service in these rural homes? Also, does she understand the hardships which must be endured on farms? We want well trained nurses for child health work, but we must have the best kind of nurses to do this rural work, if it is to be done with a minimum number of mistakes. The results which we will obtain in the rural field, will be in direct ratio to the nurse's training, and her sympathetic understanding of rural life.

Yesterday Dr. Bradley touched upon one of the big difficulties in doing rural work when she stated that the rural mother is reserved and inarticulate. In order to get a sympathetic hearing, nurses must be able to speak her language, and we must sometimes teach her new words, because she does not understand, and does not know how to express herself in terms of health. It takes time and patience, and much individual work before this upper crust of reserve is penetrated. We must overcome the suspicion she has of strangers. Much of this suspicion has been brought about by peddlers, patent medicine men, or book agents—all sorts of people—who have preyed upon the rural mother to her disadvantage. We must go slowly when we enter a rural community to work with the farmers and the farmers' wives. When we go to see a rural mother, we often for some time do not talk of anything which she can conceive of as being connected with health. Sometimes, for two or three visits, we talk only about her chickens and garden, how the calves are getting along.

When you have gained a measure of her confidence, this rural mother will allow you to talk about the health of herself and her children. The next step is to convince the father that you have not some ulterior motive in what seems to him an unwarranted interest in his family; you must talk to him in terms that he will understand. After all, the farmer and his family are very individualistic; they live unto themselves, and they do not see the outside life as we do in the cities. You must convince him of the importance of health for himself, for his wife, and for his children, because he is master in his own home, and he must be assured that you are bringing something to his family which will be of benefit.

The simplest way to do this is to talk to him about things which he sees every day, and which he understands; about his chores, his crops, his cows, his pigs. Show him that he does not feed his little pigs as he does those he is fattening for market. He feeds them in a scientific way, and it is very easy to draw his attention to the fact that he must feed his children in a scientific way, if he is going to have them grow to healthy, happy manhood and womanhood. If you can show him this relationship between the routine life of his children, and the routine life of his stock, you will very often get your message across, and he will be willing to listen to what you have to say about health for his children.

I have been told that in these rural districts, you cannot get your mothers together for group work. I am frank to admit that it is more difficult in rural districts than in the city, but it can be done, if you will start with something that does not frighten or awe this mother. She is afraid of strange, unknown things. Start in a very simple, natural way, perhaps getting two or three mothers from

neighboring farms to come together in their own homes. You can very often get your group started from just such a nucleus, and if you will give them something which will really help them in their daily life, these groups will grow in a marvelous way. It can be done. I have done it, and other nurses have done it. Besides getting them together for purely physical health work, the very fact that they secure in this way some social intercourse, means that there is a stimulation toward mental health. These farm women need recreation, and they can get it when you get them together in these little groups.

One of the most difficult things we have to face in these rural districts is getting actual nursing care to the mothers during the obstetrical period. Some nurses have partially solved this problem by training neighborhood helpers. Rural women are really very neighborly and will go miles to help a neighbor if they knew she is in need of help. If a nurse can give these women the fundamentals, she has at least started them toward the right kind of care in the rural field. The problem, as I see it from a nursing point of view, of getting help to these rural mothers, resolves itself into a comparatively simple answer, and that is that if you know these rural people, if you really like them, and have something to give them that is worth while, they are the most appreciative, the most approachable, and the most teachable people in the world.

Mrs. Charles H. Howe, Director, Child Hygiene Division, Phoenix, Ariz.: The rural mother is particularly my problem in Arizona. I find it is quite necessary that the nurse should understand how to demonstrate nursing care and health habits with the material which the mother has in her home; because when the nurse comes and proceeds to give her plans of health work, the mother says, "Well, I cannot do those things. I haven't anything to do them with. Look at my home." That is the problem which the public health nurse has to meet so much in the rural community, and it seems to me that she should give particular attention to that phase of her training.

Mrs. Reid: I quite agree with Mrs. Howe. A plan has been worked out in Florida for what we are pleased to call "Neighborhood Institutes." Because of lack of interest, time or transportation facilities, it was difficult to get the rural mothers, who are so in need of instruction in the care of themselves and their babies, to meetings arranged for in the towns, while any one of these mothers almost any day would take the baby and possibly two or three runabout children and go to visit a neighbor for an hour or so. This gave us the Institute idea. The plan is to have the nurse go into the rural communities, select an average home and have the housewife invite her friends and neighbors who are interested to come to the classes. The nurse is not permitted to take a demonstration kit with her, since one of the reasons constantly given us by women for not having obstetrical supplies is the cost of the equipment such as the nurses were accustomed to carry.

It is the nurse's business to find everything usable in a home for the preparation of obstetrical supplies that would in any way obviate the necessity of a purchase. Very often the contents of the rag bag will bring to light pieces of old linen and soft muslin which, when properly boiled and prepared, will take the place of gauze and cotton. Newspapers can be made into pads for the bed and other articles in common use in the household can be made to do duty so that the supplies necessary for an average obstetrical case can be on hand with a surprisingly small outlay of actual money. The proper preparation of a room for the patient, and the care of the baby are taught and actual demonstration made by

the nurse so that everything possible will be understood by the mother in the safeguarding of her own life and the life of the baby to come.

Miss Florence E. Walker, Supervisor of Public Health Nursing, South Dakota State Board of Health, Waubay, S. D.: A splendid way for putting things over is through the class in Home Care and Hygiene. I will tell you about one of my classes. A young mother had twin babies—I think they were born about two weeks before my classes started—and she came to every class. If she did not feel that she could take her babies out—it was very cold that winter—she would ask us to come and hold our class in her home. We called them our “Red Cross Twins.” I did not know until afterwards how very much that mother learned. Then she told me in a letter and sent me the babies’ pictures. That was just one mother for a great deal was done in that way, and there were many others in the several classes.

Mrs. Reid: A great deal of help is obtained from the Red Cross classes in home hygiene and care of the sick. They have taught many people in many communities something that should be common knowledge in every home regarding the care of the family. There is another way in which we can reach the rural mothers and I think it is a very fine way. We have with us Doctor Frances Sage Bradley, who is now Director of the Bureau of Child Hygiene in the Arkansas State Board of Health, but who, a while back, was with the Children’s Bureau Healthmobile. We will be interested to hear from her. I am sure we shall get some real information from Doctor Bradley along this line, since her work with the Healthmobile covered rural communities for a considerable period of time.

Dr. Bradley: I am sure we are all beginning to realize the fact that if we would sell public health work, we must make it attractive; and to be attractive it must be novel. The Healthmobile is not novel to you or to me, but it is novel to the rural public, and we have found it a most satisfactory way of reaching remote people who for various reasons could not come to us. We have taken the Healthmobile across the sandy wastes of southern Illinois; into the foothills of east Kentucky; up the more remote mountains of West Virginia which Mrs. Dillon can tell you about; and down into the swamps of Arkansas. In every case it has proved effective and convincing. Its mechanical contrivances appeal to the men and boys; its immaculateness and unique conveniences fascinate the women, and to the children it is a wonderful play house. I want to warn you however to consider carefully the expense of the project before giving your order for a Healthmobile. The first cost is not necessarily prohibitive, but the maintenance of staff and upkeep cost a small fortune.

I cannot close without admitting that even without money we in Arkansas are doing the very thing against which I have been warning you. It is poor policy as a rule to report on activities in the future tense, but I must justify an apparent inconsistency. We have bought a mean looking sort of dog wagon affair which we dignify by the name of truck. It is also known as the patrol wagon and upon occasion we have even been accused of using this as a blind for our real mission of organizing a woman’s branch of Ku Klux Klan known as the Kamelia. We don’t object however for we have a vision of a wonderful great shoe made by slipping a big canvas cover over our truck. The top of it will be fastened to a railing which goes round the upper edge of the truck like a 5th Avenue bus. Through the lacing down the front the chauffeur will manipulate his wheel and

drive the shoe round a small town collecting the crowd and leading the procession to the grounds of the school, the court house or other central location. Inside of course will be the old woman who lived in a shoe with so many children she didn't know what to do. These will be scrambling over the top and overflowing on to the grounds where they will constitute the leading characters in a simple pageant arranged by an advance agent. Certain ones will be dressed as milk bottles, fruits, vegetables and wholesome things, while others will represent pacifiers, nursing bottles, frying pans, pies and other undesirables. Each child taking part will naturally have a host of relatives and friends in the audience, so we hope to get our message to the village, and at the same time utilize an unsightly truck which is all we can afford.

Just a word about fairs. I always manage if possible to make my escape from the state or county fair. I do not believe this is the place to do instructive work, and public health work is instructive. People go to these fairs for diversion, not education, and it has been my observation that much good energy and money are expended to small purpose at such places. The literature is wasted, advice goes unheeded and the child welfare booth becomes a side show. Not so the community fair. Here neighbors and in-laws compare their poultry and garden truck—their home products, including their children. Everybody feels that had Mrs. Smith called on the doctor every month as he told her to do, she and the baby might be living today. Everybody knows that Mrs. Brown's baby never was sick a day in his life until she began feeding him from the table; that Susie's eyes were never weak until after she had measles; and that Johnnie's deafness dates from his scarlet fever. Neighbors want to compare the weights of their children and methods of improving them. In fact the community fair is a family fair where real educational work may be done, undisturbed by the noise and confusion and excitement of the whoop la event. The more wholesome spirit of comparison rather than competition, enables one to get closer to the home life of the people, and the community fair has seemed to me an ideal place for the discussion of community problems.

Mrs. Reid: Is there any one here who has used the Ford runabout with the slip-on body, a Delco light and portable machine? If so, how successful have you found it to be? This would make possible the showing of health films where perhaps the \$1,800 necessary to buy a "Healthmobile" could not be raised.

Miss Wedgwood: The question has been asked about the advisability of traveling Healthmobiles. This past summer in Maryland, we had a Ford truck with a special body fitted up as a consultation room. The initial cost of this was about \$1,000. The work of this truck has created a great deal of interest, but for mountain work a Ford truck is not feasible. The maintenance of such a Healthmobile is also quite expensive.

Miss Ada Graham, South Carolina Bureau of Child Hygiene: It may interest Dr. Bradley and others who are considering a truck, to know that we ran one in South Carolina for seven months this summer at a comparatively small cost. We bought this truck from the Babies' Dispensary in Cleveland for six hundred dollars and after putting on it all necessary equipment, new tires, and paint inside and out, its cost, ready for the road, was fourteen hundred dollars. We adopted a different plan from that usually employed. The staff consisted of two nurses and a mechanic, who was trained to assist in weighing and measuring the children. We did not carry a pediatrician.

We got in touch with the county medical societies and offered the service of the truck to their counties, asking for their cooperation in conducting the conferences. They were asked to make the examinations during the week at outlying points in the county, and as they held these conferences, to select all cases that seemed to need special examination and refer them to the final conference, which was held at the county seat. At these conferences a pediatricist and orthopedist were present. The local physicians gave splendid cooperation, and not only referred many cases to the special conference, but many times were present themselves to discuss the cases with the pediatrician. We believe that we received about 95 per cent cooperation from the local physicians and were enabled to examine about 6,000 children. The truck has awakened so much interest in health work in the state that we feel it is largely responsible for the many inquiries regarding the possibilities of putting on county health units in counties that have not previously shown any desire for them.

Miss Elba Morse, American Red Cross Nursing Field Representative: I want to tell you that two years ago this summer, when I was a county nurse in Michigan, we had a child welfare special that cost \$275. It was a four wheel trailer that we bought secondhand. We built a house on it and had it equipped for a baby clinic. We could attach it to the back of our Ford and we were able to get all the work through the women's clubs. Our nursing committee asked them to put on a health day and then the women brought the babies in to the clubs. Then the nurse came on with the child health special and the local doctors assisted. In that way we were able to reach every part of the county, weighing and measuring, and giving consultation to about 3,000 women. We drove it to Columbus, Ohio, to the National Red Cross Convention. We had our first mishap there when it ran into a ditch, but it was not hurt very much. This summer we are still using it. It really does not cost a great deal. It cost us nothing more to run it than to run the Ford, and we are able to reach a great many people.

Dr. Paul J. Zantay, Bureau of Child Hygiene, State Department of Health, Baltimore, Md.: I just want to add a few words to the experiences of Miss Wedgwood, whom I worked with in our "Healthmobile" which we had in the mountainous part of the state. I want to tell you about the experiences I had as one of the physicians of this "Healthmobile." I think the success of the "Healthmobile" depends upon how the ground has been prepared before it arrives. We were principally working in the county fairs and only in one or two instances have we visited communities when there was no fair. We have found that in some of the fairs we had great success, and in others only a few mothers came with their babies. We also tried to use those attractions which Dr. McKay mentioned, exhibits, talks, demonstrations, etc., with various results. In one or two instances we had surprisingly good success and on the whole my opinion is that the "Healthmobile" is certainly a very good way to reach the mothers in their own communities and arouse their interest by this somewhat spectacular method. I entirely agree with Dr. Bradley that we should avoid the fairs, because there are too many other attractions for the mothers at a fair which make our work very difficult. I think that the real use of the "Healthmobile" is to go to small communities which are very difficult to reach in any other way. I have to repeat that it is very important to prepare the field and use every means of publicity to draw the attention of the mothers to what the purpose of the "Healthmobile" will be. The best way of working the "Healthmobile" will be to have a fairly elastic program planned, which would permit it to stay in a community for a shorter or longer time

according to local conditions, because in some places there will be very much to do, and in others perhaps very little, and the future success of this work will depend upon how thoroughly it has been carried out in a place.

Mrs. Reid: I think that the use of the advance agent is necessary. Much valuable time of the personnel of your "Healthmobile" is wasted when they must do their own advance work, such as newspaper publicity and instructive information regarding the "Healthmobile" giving reasons for the work, methods to be employed, and the good that can be accomplished if sufficient interest is stimulated prior to the visit of the "Healthmobile" to the community. The response from parents will be greater if the understanding is clear regarding a cooperative piece of work.

Mrs. Weeks: Is someone going to state what to do with the mothers after they get there on the truck?

Mrs. Reid: The physician in charge of the "Healthmobile" who makes the examinations has a conference with each mother regarding her own care or the care of her babies, as the case may be, depending on the conditions found.

Mrs. Weeks: Just as you do in an infant welfare session in town?

Mrs. Reid: Yes, only that where it is impossible to bring the mother from the farm to your town welfare conference, the "Healthmobile" can go to her and in this way a contact can be made that would be impossible otherwise.

Miss Burton: I would like to ask if there is any follow-up work done after the truck goes on, and how the local doctor is brought in.

Miss Wedgwood: In Maryland we have a number of advisory nurses. These advisory nurses work with the local county nurses in doing the follow-up work with the children who have been examined in the truck. I think it is important that the local nurse be brought into this follow-up work, because after all, it is her responsibility as much as ours.

A report is made to the family physician of all children examined at the truck.

Dr. Ruth E. Boynton, Division of Child Hygiene, State Board of Health, Minneapolis: Minnesota has a Correspondence Course in the Hygiene of Maternity and Infancy. It was prepared by Dr. E. C. Hartley, former Director of the Division of Child Hygiene. The course consists of fifteen lessons covering the subject of Maternal and Infant Welfare, and is issued through the regular channels of the Extension Division of the University. A group of ten questions accompanies each lesson. These questions are answered by the women, sent here for correction and returned to them. Each woman who has successfully completed the fifteen lessons is given a certificate by the division.

Miss Blanche Webb: It is being done in Virginia. I am not doing it so I do not know all about it, but it is being done by the State Board of Health under Dr. Bryden.

Dr. Louise E. Boutelle, Director, Division of Child Hygiene and Public Nursing, State Department of Health, Bismarck, N. D.: To begin with, I wish to tell you that we do not consider our methods ideal. We are working in a state measuring four hundred miles from east to west with fifty-three counties, and a large foreign population. There are less than twenty county nurses financed either by the Red Cross or the county commissioners. As to personnel of the department, one nurse and I do all the organizing, field work, and clerical work, with an appro-

priation of less than \$10,000 to cover salaries, traveling expenses, printing and equipment.

I will speak briefly of home demonstration agents, as in North Dakota they are very few. We feel that the greatest work they have done for us is to give us through the Extension Division of the Agricultural College at Fargo, the opportunity to prepare a lesson on prenatal and child care. This is offered for study to the Home-Makers Club, and reaches even the most obscure of the rural women.

Our large problem is to reach the rural mother who is perhaps 25 to 60 miles from the nearest physician, in a state poorly manned by doctors, where some of the largest counties have no physicians in their borders, and where, by reason of distance, poor roads, and poverty, medical care is almost impossible. Our first act on going into a county is to secure the cooperation of the county health officer and of any physician who may be located within the county. However we must remember that in North Dakota the county health officer is, like the other general practitioners, usually a busy man, with a radius of perhaps forty miles in all directions to cover. It is impossible to expect these men, no matter how cooperative their spirit, to spend much time in actually assisting our work.

Coming to the matter of fairs, we feel that in a state where it is necessary to secure publicity with the least possible expense, the fairs give us a means of reaching rural mothers through a wide territory. In North Dakota there are four fairs which receive state aid. We have put on pre-school conferences at all these, and at as many county fairs as we were able to reach. In the Middle West, the fair is the great social event of the season, and rural families often start at three o'clock in the morning and drive 150 or 200 miles to attend it, reaching home late the following night. Even if only two or three children from a county are examined, we have secured a foothold when we wish to go into this county for further work in the future. Our publicity in connection with the fairs is carried out largely through the local newspapers and the premium list. In addition, conspicuous posters are placed in the rest rooms and women's departments, and the building in which examinations are held is prominently placarded. We have found that one of the best methods of interesting the mothers at the fairs sufficiently to bring in their children for examination is the award of ribbons. We advertise the fact that every child scoring 97 per cent or above will receive a blue ribbon. On this are printed in gold letters the name of the fair, the date, and the words, "Better Baby." By using these ribbons the jealousy incident to the giving of prizes is avoided. We offer one prize, for the baby making the most improvement from one year to the next year. The psychological effect of having the baby in the family receive a ribbon similar to the one given to father's prize calf, seems to work very well. One other method we have adopted is that of being megaphoned from the judges' stand at a race track. For example, it will be announced "The livestock parade of prize-winners will take place in front of the Grand Stand tomorrow at 1:30. Have your babies received as good care as your cattle? Remember there is a free Baby Conference in the Old Poultry House north of the Administration Building every day of the fair."

Coming to the matter of reaching the rural mother through the clubs, we heard considerable discussion yesterday on the comparative value of Parent-Teacher Associations, federated clubs, etc. In North Dakota, clubs are clubs. We have worked chiefly through the Parent-Teacher Associations, the State Federation of Women's Clubs, the Non-Partisan Federation of Women's Clubs and the W. C.

T. U., because we are able to secure the names of president and secretary of these organizations. After having communicated with the county health officer and the local physicians in the county, we write to an officer of each club in the county. It is impossible as is plainly evident, through the lack of personnel, time and money, to do our own publicity work in a county, preceding our conference work there. We have found that the clubs are very cooperative if properly directed. Our first suggestion is that they form themselves into three or four groups, corresponding to the number of conferences we wish to put on. We outline the publicity work for the newspapers, and request that committees formed by representatives of the various clubs publish notices of our conferences in the local papers, and in any daily paper subscribed to in the community, for two weeks previous to the conferences. We also suggest the preparation by school children of health posters to be displayed in the windows in the business district. We also suggest that every merchant use a display window which will be appropriate for Child Welfare Week. It is surprising what attractive windows a town of 150 or 200 inhabitants can produce.

First securing the interest of the county superintendent of schools, we suggest that enough dodgers giving the location and date of each conference be distributed through the agency of these same club women, to every town and rural school in the county so that one dodger may reach each family having children in school. This gives work not only to club women in towns, but also to the rural members. In addition, one of these dodgers is wrapped in every bundle leaving drygoods, grocery or hardware stores for a week preceding the conference. In many communities, the club women have also made a personal canvass by automobile in their community, reaching every family having children of pre-school age.

Through these methods we have found no difficulty in securing a good attendance at all meetings. I hesitate to state the number of patients we have examined in one day. Our record attendance, with no other physician than myself, was 97. On that day we started work at 8:00 A. M., and worked until 9:30 P. M., with fifteen minutes for lunch, and no dinner. It has seemed impossible, if a woman comes perhaps thirty miles in a lumber-box wagon with a team of mules, bringing six or seven children under eight years of age, to refuse to examine her family simply because we have reached a certain fixed limit or a certain set time. Most of our meetings average above rather than below fifty.

Some question has been raised as to follow-up work. We have had no trouble in interesting the club women in this. For example, our local W. C. T. U. organizations have offered to prepare and dispense sterile obstetrical packages to prospective mothers, other organizations have undertaken to aid young mothers in preparing layettes, and similar duties of this kind have been taken up. It is also an easy matter to assign certain definite individuals to others for friendly oversight. We may tell Mrs. Brown, who has raised a sturdy family of seven children, to run into her neighbor's, Mrs. Smith's, two miles to the east, and show her how to prepare food according to our instructions, for the baby who is suffering from malnutrition. In cases of this kind we choose a woman who we think will be able to handle the work practically and well. We realize that the ideal method of follow-up work is to place a trained worker of some sort in the community, but we feel that this sort of follow-up work is better than none, and in aiding ourselves, we have accomplished another important thing, that is, the development of a community spirit, which cannot fail to be a powerful force for good in the future.

HEIGHT AND WEIGHT AS AN INDEX OF MALNUTRITION

Round Table

LOUIS I. DUBLIN, Ph.D., Statistician, Metropolitan Life Insurance Co., New
York City, Presiding.

Dr. Dublin: You will remember how yesterday evening in his remarkable address, Dr. Vincent, commended the Association because from its very inception it had made provision for scientific research. This Association, perhaps, more than any other in the public health field is not ready to take for granted all of the practices and procedures that have grown up in the course of the last twenty or thirty years. Now, that is not merely a polite gesture by Dr. Vincent. This is, in fact, a characteristic of the Association. The Board and the Executive Staff follow carefully all of the activities of the Association, measure them wherever they can be measured, take stock constantly, and determine whether the directions and tendencies of the work are correct or whether they need modification. In every way, they try to keep the yardstick constantly in sight.

During the course of the last year, the Executive Staff knew that a number of us had been at work on the problem of the height and weight of children. At the same time there was in progress in the Association a revision of the height and weight tables that had originally been prepared by Dr. Wood. Mr. Dinwiddie was kind enough to ask us to examine these tables and to comment on them. Later, when our own research was done and we made the suggestion that it would be desirable, perhaps, to bring our results to the attention of the Association at this meeting even though our results did materially diverge from the general conclusions that had previously guided workers in this field, they were very ready to provide this place and time for an open and frank discussion. It is a courtesy which I appreciate thoroughly. To me it is a token of the spirit of progress that can bring nothing but great and excellent results to the Association.

We have then tonight a round table discussion on the validity, or rather, on the value of the general procedure of weighing and measuring children as a guide to their nutrition. That, then, is our program. I shall lead the discussion with a paper that has been prepared by Mr. Gebhart and myself on the heights and weights of Italian children. I will be followed by Dr. Schroeder, the pediatrician who was in charge of the original examinations of these children and whose records we used. The discussion will then be taken up by Miss Brown, who has some interesting material on a group of children of another city. She will be followed by Dr. Wood, and the meeting will then be thrown open for general discussion.

DO HEIGHT AND WEIGHT TABLES IDENTIFY UNDER- NOURISHED CHILDREN?

LOUIS I. DUBLIN, Ph.D., Metropolitan Life Insurance Company, New York, N. Y., and JOHN C. GEBHART, Association for Improving the Condition of the Poor, New York, N. Y.

The purpose of this study was to determine the degree to which physicians and nutrition workers can safely trust the weight tables ordinarily used in selecting the undernourished in a group of children under observation. As is well known, the usual procedure in nutrition clinics and in the schools is to draw a line 7 per cent below the average weight for age and height and to regard any child that falls below this line as undernourished. Others have drawn this line at 10 per cent below the average. But, quite irrespective of the limit of underweight actually used, the movement for improving the nutrition of children has been very extensively developed in recent years on the assumption that the weight of the child was a very safe, and in the opinion of some, an infallible guide by which the nutrition worker could in the first instance single out those who needed attention. While this simple procedure has made much headway in the United States, it has not gone unchallenged. One of us¹ in a previous publication has warned against the unquestioned continuance of this procedure. Many physicians and nutrition workers have from time to time found difficulties and discrepancies which have likewise crept into the literature to indicate that all was not well with the method. In this study, we are fortunately able to see in one group of children, at least, whether underweight and undernutrition are, in fact, synonymous terms and, if they are not, to what extent those who have followed the usual methods have probably erred.

The materials we have had at our disposal for study consisted of the examination records of 1,878 boys and 2,169 girls under the care of the Association for Improving the Condition of the Poor in its health work among the Italians in the Mulberry District of New York City. The Association was careful to place this work under the direction of a

¹ "Height and Weight Standards in Nutrition Work among Children of Foreign Parentage," Louis I. Dublin. Read before New York Nutrition Council, March, 1921.

well-trained pediatrician, Dr. L. C. Schroeder, who examined the apparently well children coming under observation of the health center. The doctor's diagnosis of defective nutrition was based on the picture of the whole child and not on the weight and height alone. Such items as the state of the musculature, the lustre of the eyes, the color and bearing of the children, their posture, and the relative amount of subcutaneous fat were all taken into account in assessing the child's nutrition. In addition, the physical measurements of height and weight were given careful consideration in relation to the child's age. It was, therefore, possible with this material to answer two pertinent questions, as follows:

1. To what extent is the diagnosis of malnutrition by the physician in accord with the selection that would have been made had the standard height and weight tables alone been used? and,

2. Would a selection of the children on the basis of height and weight tables constructed for Italian children alone have been more in agreement with the doctor's diagnosis?

In order to answer the first question, i. e., how far the Standard (Wood-Baldwin-Woodbury) Tables would have agreed with the doctor's diagnosis in the selection of undernourished children, we applied first to the well-nourished and then to the undernourished children the 7 per cent and the 10 per cent tests. Well-nourished children by the doctor's diagnosis are considered not in agreement with the scale if they are 7 per cent or more underweight according to one standard or 10 per cent or more underweight according to the other standard. Such children would have been called undernourished if the Wood-Baldwin-Woodbury Tables alone had been used. These cases represent the "misses" made on the side of good nutrition. Similarly, not all children diagnosed as undernourished by the doctor, who were less than 7 per cent underweight or less than 10 per cent underweight, are in agreement with the tables. They would have been called well-nourished according to the height-weight tests, but are, in fact, malnourished children as determined by medical examination. These cases represent the "misses" on the side of poor nutrition, a much more significant failure of the tables.

At the outset, we encountered a serious shortcoming of the standard tables in that they gave no weights corresponding to the very short children occurring among Italians. This defect was remedied as best we could by extrapolating the lower limits of the tables. But, on the whole,

the tables could be used and the comparison could readily be made. The first table shows such a comparison of the results obtained by the doctor's diagnosis on the one hand and by the two tables on the other.

Table I.—A Comparison of the Selection Made by Doctor's Diagnosis of Nutrition and the Use of the Wood-Baldwin-Woodbury Tables.

Boys										
WELL-NOURISHED						UNDERNOURISHED				
Age	Doctor's diagnosis	Weight table 7% limit	Per cent agreement	Weight table 10% limit	Per cent agreement	Doctor's diagnosis	Weight table 7% limit	Per cent agreement	Weight table 10% limit	Per cent agreement
2	133	133	100	133	100	73	11	15.1	6	8.2
3	170	166	97.6	169	94.4	97	7	7.2	3	3.1
4	170	168	98.8	170	100	76	9	11.8	2	2.6
5	205	202	98.5	204	99.5	54	7	13.0	1	1.9
6	179	176	98.3	178	99.4	65	17	26.2	7	10.8
7	187	180	94.9	186	99.3	77	25	32.5	9	11.7
8	99	94	94.9	99	100	61	20	32.8	10	16.4
9	99	96	97.0	98	99.0	49	23	46.9	13	26.5
10	89	85	95.5	87	97.8	45	17	37.8	10	22.2
All ages	1,281	1,250	97.6	1,274	99.5	597	136	22.8	61	10.2

Girls										
WELL-NOURISHED						UNDERNOURISHED				
Age	Doctor's diagnosis	Weight table 7% limit	Per cent agreement	Weight table 10% limit	Per cent agreement	Doctor's diagnosis	Weight table 7% limit	Per cent agreement	Weight table 10% limit	Per cent agreement
2	118	114	96.6	115	97.3	75	19	25.3	18	24.0
3	171	167	97.7	167	97.7	105	10	9.5	8	7.6
4	200	179	89.5	181	90.5	95	17	17.9	3	3.2
5	194	192	99.0	193	99.5	73	9	12.3	6	8.2
6	198	187	94.4	197	99.5	94	45	47.9	19	20.2
7	142	134	94.4	140	98.6	99	25	25.3	14	14.1
8	115	108	93.9	111	96.5	82	53	64.6	29	35.4
9	128	121	94.5	126	98.4	85	41	48.2	25	29.4
10	123	110	89.4	112	95.9	72	38	52.8	20	27.8
All ages	1,389	1,312	94.5	1,348	97.0	780	257	32.9	142	18.2

The first striking fact that comes to hand is the marked disagreement as regards malnourished children in the results obtained by the two methods. The physician's careful examination showed that 34 per cent of all the children were malnourished; the weight tables with the 7 per cent limit would have selected 12.4 per cent, and with the 10 per cent limit, only 6.2 per cent, as requiring nutrition care. Obviously, these two sets of figures are irreconcilable. Discrepancies appear in both groups, i. e., the well-nourished as well as the malnourished children, but not in the same degree. The differences in the first group

are not great, for, according to the 7 per cent limit, 97.6 per cent of the boys and 94.5 per cent of the girls would have been selected in agreement with the doctor's diagnosis. It is only at the older ages, more particularly at age ten, that any considerable number of the well-nourished boys and girls would have been missed. On the other hand, the use of the tables fails almost altogether in selecting the undernourished children. Among the boys, only 22.8 per cent would have been selected in agreement with the doctor's diagnosis if the 7 per cent limit had been used. Among girls, the 7 per cent limit would have brought in 32.9 per cent of the undernourished and the use of the 10 per cent limit, only 18.2 per cent.

It is at the youngest ages, moreover, that the worst results are obtained by the use of the standard tables for selecting undernourished children. Under age six only the smallest number of boys would have been selected by the tables; in some cases (age three) as few as 7 per cent of the total by the 7 per cent limit and less than 2 per cent (age five) by the 10 per cent limit. The girls show up somewhat better, but they, too, gave extraordinarily low figures, indicating that among Italian children, at least, malnutrition as diagnosed by a skilled physician can go hand in hand with normal weight or with only slight underweight. In view of the fact that it is among pre-school children that so much nutrition work is done, it is particularly unfortunate that the tables break down most at this point.

The standard tables have little or no value for selecting undernourished Italian children. A method which misses three-fourths of all the children whom a competent physician after a thorough examination would call undernourished has certainly scant value even as a "rough index for sorting out the most needy cases." The method ordinarily used by so many agencies in selecting their cases for intensive nutrition work would appear, therefore, as quite unsound. Just why the standard tables should have failed so dismally in this case is undoubtedly due in part to the fact that Italian children deviate widely from the "national" type. These Italian children are from 1 to 7 per cent below the average of the Children's Bureau in weight, and they are from 1 to 10 per cent below the average in height. They tend to be rather shorter and stockier than the children of the country at large. The standard table does not fit their build and the use of such a table obviously leads to an absurdity.

We shall proceed with the consideration of the second question. The

failure of the standard tables suggested that better results would have been obtained through the use of a build-norm constructed for Italian children only. In the absence of a generally accepted table for such children, we proceeded to prepare tables of average heights and weights, using the measurement of the present group of children as our base. To be sure, the paucity of cases gave us tables of averages of limited range and with many irregularities. We were, therefore, compelled to construct simpler tables giving only the average weights (irrespective of height) for each age and for each sex, and these were used as our standards. The following table shows the average heights and weights for Italian boys and girls for each year of age as represented by the children in the Mulberry District of New York City.

Table II.—Average Heights and Weights of Italian Boys and Girls in Mulberry District of New York.

Age	Average Heights (inches)		Average Weights (pounds)	
	Boys	Girls	Boys	Girls
2.....	31.6	31.3	27.2	26.1
3.....	34.1	33.9	30.9	29.7
4.....	36.9	36.6	34.7	33.6
5.....	39.4	39.0	38.6	37.0
6.....	41.5	41.5	42.1	40.7
7.....	44.0	43.8	46.6	44.9
8.....	46.2	46.2	51.4	48.8
9.....	48.0	47.7	56.2	53.6
10.....	49.9	50.1	60.6	59.2

The above figures are for children without shoes but with ordinary indoor clothing. The ages as given are for the nearest birthday. A comparison with corresponding figures for Italian children, as prepared by the Children's Bureau¹ and the Detroit Department of Health,² show close agreement, especially for weight, and we felt reassured that our table did really represent what a fair sample of first generation Italian boys and girls weigh. The 7 and 10 per cent limits of underweight were then computed and applied to our cases as a means of selecting the well from the undernourished children. The results of this

¹"Statures and Weights of Children under Six Years of Age," R. M. Woodbury, Washington, D. C., 1921.

²"A Preliminary Study of Standards of Growth in the Detroit Public Schools," by Paul C. Packer and Arthur B. Moehlman. *The Detroit Educational Bulletin*, No. 5, June, 1921.

selection and the comparison with the doctor's original diagnosis as to nutrition are shown in Table III.

Table III.—A Comparison of the Selection Made by the Physician's Diagnosis of Nutrition and the Use of the Italian Tables.

BOYS										
WELL-NOURISHED						UNDERNOURISHED				
Age	Doctor's diagnosis	Weight table 7% limit	Per cent agreement	Weight table 10% limit	Per cent agreement	Doctor's diagnosis	Weight table 7% limit	Per cent agreement	Weight table 10% limit	Per cent agreement
2	133	123	92.5	127	95.5	73	86	49.3	27	37.0
3	170	152	89.4	158	92.9	97	57	58.8	43	44.3
4	170	148	87.1	159	98.5	76	37	48.7	28	36.8
5	205	168	82.0	184	89.8	54	28	51.9	21	38.9
6	179	154	86.0	165	92.2	65	38	58.5	27	41.5
7	137	117	85.4	125	91.2	77	28	36.4	18	23.4
8	99	82	82.8	87	87.9	61	24	39.3	17	27.9
9	99	86	86.9	92	92.9	49	30	61.2	27	55.1
10	89	68	76.4	82	92.1	45	22	48.9	20	44.4
All ages	1,281	1,098	85.7	1,179	92.0	597	300	50.3	228	38.2

GIRLS										
WELL-NOURISHED						UNDERNOURISHED				
Age	Doctor's diagnosis	Weight table 7% limit	Per cent agreement	Weight table 10% limit	Per cent agreement	Doctor's diagnosis	Weight table 7% limit	Per cent agreement	Weight table 10% limit	Per cent agreement
2	118	107	90.7	112	94.9	75	47	62.7	34	45.3
3	171	157	91.8	163	95.3	105	52	49.5	44	41.9
4	200	175	87.5	188	94.0	95	50	52.6	36	37.9
5	194	170	87.6	182	93.8	73	40	54.8	34	46.6
6	198	175	88.4	186	93.9	94	48	61.1	34	36.2
7	142	125	88.0	129	90.8	99	46	46.5	32	32.3
8	115	106	92.2	110	95.7	82	42	51.2	31	37.8
9	128	117	91.4	120	93.8	85	42	49.4	30	35.3
10	123	102	82.9	110	89.4	72	31	43.1	23	31.9
All ages	1,389	1,234	88.8	1,300	93.6	780	398	51.0	298	38.2

The use of the special Italian table as a guide to nutrition is again attendant with fairly good results in selecting the well-nourished children, although the correspondence is not as high as with the standard tables. The selection of the malnourished children is accomplished much more successfully, however, than with the standard tables, but still far from satisfactorily. Among the boys and girls, practically one-half of those diagnosed as malnourished by the doctor would have been selected also through the use of the Italian table with a 7 per cent limit and 38.2 per cent would have been selected on the basis of the 10 per cent limit of underweight. The table is considerably better adapted

for use at the younger ages than at the older ones; for, at some of the pre-school ages it actually selects as many as 60 per cent of the children in agreement with the doctor's diagnosis of undernutrition.

But, even if the expedient is more successful than the first, it is still far from an appropriate means for selecting undernourished children; for no one would think of approving a method which caught only at best one-half or even three-fifths of those children that were in need of intensive care. Possibly, it will be objected that the marked discrepancies in the use of height and weight tables to which we are referring follow not so much from the defects of the method as from the errors in diagnosis or the personal bias of the examining physician. While this is logically a possibility, we believe that the objection is practically ruled out in this instance by the skill of the examining physician and equally by the fact that the children of the Mulberry District present rather striking histories of diseases and defects very clearly associated with malnutrition. A conservative estimate based largely on X-ray diagnosis indicates that 50 per cent of the babies of the district develop marked cases of rickets. A study of 2,181 examination records¹ indicated an average of 2.5 defects per child for the pre-school group, and 2.4 per child for the group from six to eleven and 1.8 per child for those over twelve. Fully 44 per cent of the children of pre-school age had serious nose and throat defects. The defects resulting from rickets were unusually prevalent among the pre-school group; 25 per cent had serious orthopedic and postural defects closely associated with rickets in childhood. One child out of six (16.5 per cent) had either protuberant abdomen, palpable spleen or other abnormalities of the abdominal wall and cavity which suggested a rachitic history and poor nutrition. In other words, the whole clinical picture of the children of this area supports the doctor's judgment of poor nutrition. Many insist that what we call the child's nutritional condition is merely a general index of the child's health; poor nutrition is the end result of defects and diseases of childhood, combined usually with faulty or inadequate diet and incorrect habits of personal hygiene.

There is other evidence, however, of the failure of height and weight standards to serve as a reliable means of selecting undernourished children. In 1916, the Association for Improving the Condition of the Poor, and the New York Health Department cooperated in a

¹"Pre-school Age Physical Defects," John C. Gebhart, *Mother and Child*, June, 1920.

complete physical examination including an assessment of the nutrition of approximately 2,500 children in the Gramercy District of New York City. Heights and weights were also recorded. Although the doctor's judgment of the child's nutrition was based partly on apparent underweight, other factors such as subcutaneous fat, color and musculature, played quite as important a rôle. The results of this study were analyzed by Mr. Frank A. Manny.¹ The article warrants study by all who are interested in this question. Weight tests were applied to those children diagnosed by the doctor as undernourished. The weight-age test would have missed practically one-third of those called undernourished by the doctor since 33.5 per cent of that group were less than 10 per cent underweight for age. The weight-height test, however, failed most dismally. Of the children diagnosed as undernourished, 64.4 per cent would have been missed by this test, since that proportion of the undernourished children were less than 10 per cent underweight for height. The children in the latter study were largely of native parents and were living in a much more favorable social and economic environment than the Italian children of the Mulberry District. We might expect them, therefore, to conform more closely to the "national" type of build. The fact is, however, that fully two-thirds of the undernourished children would have been missed by the usual height-weight standard.

A similar result was recently obtained by Dr. Josephine S. Baker, formerly Director of the Bureau of Child Hygiene of the New York Department of Health.² She compared the selection of malnourished children by the complete examination, the use of the Wood tables, and the von Pirquet method. Boys uniformly showed a much larger number of cases malnourished by the physical examination than by the use of the weight table. The discrepancy between the two methods was most marked at the younger school ages, but really persisted up to age thirteen. Among the girls, the excess of malnourished cases was concentrated at the ages between six and ten. It is interesting to observe that the younger members of this group of New York City children showed approximately twice as many cases requiring intensive nutrition care on the basis of the physical examination as on the score of their weight alone.

¹ "A Comparison of Three Methods of Determining Defective Nutrition," Frank A. Manny, *Archives of Pediatrics*, Feb., 1918.

² "Methods of Determining Malnutrition," *Nation's Health*, V, No. 1, January, 1923.

We find, moreover, that our findings are strongly corroborated by the U. S. Public Health Service which has recently completed a study¹ of 10,000 school children, the purpose of which was to relate underweight to undernutrition. The children were weighed and measured and their nutritional condition diagnosed by medical officers of the U. S. Public Health Service. These children, all of native parentage, resided for the most part in small towns and rural areas in South Carolina, Virginia, Maryland, Delaware and New York State. We have, therefore, a study very similar in method to our own, but dealing with an entirely different type of child. We must refer the reader for the details of this study to the report of the U. S. Public Health Service for January 12, 1923. We are concerned for the moment only with the results of the application of the weight test to this particular group of children.

In this study, Dr. Clark of the Public Health Service and his associates addressed themselves to the same question we have raised in our own study, viz., the degree of correspondence between the use of the arbitrary limit of 10 per cent below the average weight and the doctor's diagnosis of malnutrition. As in our study, the standard used was the average weight for each year of age of the children under observation. The following table presents the main results of the comparison.

Table IV.—A Comparison of the Selection Made by Doctor's Diagnosis of Nutrition and the Use of Weight Tables for Native Children of Southern Communities, U. S. Public Health Service.

Sex	WELL-NOURISHED			UNDERNOURISHED		
	Doctor's diagnosis	Weight table 10% limit	Per cent agreement	Doctor's diagnosis	Weight table 10% limit	Per cent agreement
Boys	4,174	3,436	82.3	863	377	43.7
Girls	4,181	3,270	79.2	805	427	53.0
Both sexes	8,305	6,706	80.7	1,668	804	48.2

There is apparently a closer agreement between underweight and undernutrition among the children of native parents in these southern communities than among those of Italian parents. In our study, only

¹ "Weight and Height as an Index of Nutrition," Taliaferro Clark et al. *Public Health Reports*, U. S. Public Health Service, xxxviii, No. 2, 1923.

38.2 per cent of the undernourished children were 10 per cent or more below the average weight of the group, while in the U. S. Public Health Service study, 48.2 per cent of the undernourished children were 10 per cent or more underweight. This difference between the two studies may easily be reconciled, but in any case, it is clear that, even among native-born children, no great reliance can be placed on the use of a height and weight table as a substitute for a careful physical examination to discover all or even a good sized proportion of the cases needing nutrition care. The missing of 51.8 per cent of the cases cannot easily be justified.

It must not be inferred, however, that underweight is in no way associated with malnutrition. A careful analysis of our material clearly indicates that the greater the degree of underweight, the greater the probability of a child's being undernourished. Of all the children who were below average weight of the group for age, only 54.1 per cent were diagnosed "undernourished." Of those who were 7 per cent underweight, 67.4 per cent were "undernourished" and of those 10 per cent underweight, 73.4 per cent were so considered by the physician. The greater the amount of underweight, the more likely is the child to be malnourished. The trouble with the use of Standard and other tables in finding children in need of nutrition care is not that those singled out are badly chosen, but rather that not enough of them who are truly malnourished are found by this method. Underweight is a sharp enough index of malnutrition, but it does not cut off a big enough segment of those who should be included.

We may then conclude that the use of height and weight tables as a guide to the state of nutrition of children is not attended with success. The question, then, is: What method is indicated? The answer is, we believe, as follows: A diagnosis of nutrition should be made in every case only after a careful physical examination by a competent physician. We are all aware that there is still much lack of uniformity in the making of such physical examinations of children. But, as we interpret the tendency of the best medical opinion, it is to make the examination as comprehensive as possible, and to make the diagnosis, not on any single item, but rather on a variety of signs or symptoms. As Sir George Newman says: "Thus, in endeavoring to estimate a child's nutrition or its opposite (*viz.*, malnutrition), we must think not only of bulk and weight of body, but of ratio of stature to weight; of the general balance and 'substance' of the body and of its carriage and

bearing; of the firmness of the tissues; of the presence of subcutaneous fat; of the condition and process of the development of the muscular system; of the condition of the skin and the redness of the mucous membranes; of the nervous and muscular system as expressed in listlessness or alertness, in apathy or keenness; of the condition of the various systems of the body, and, speaking generally, of the relative balance and coordination of the functions of digestion, absorption, and the assimilation of food, as well as of the excretion of waste products. It is obvious that these are data which are likely to lead to a much more reliable opinion than the consideration of any one factor or ratio, however expeditiously obtained or convenient in form or practice, and these data will demand a wider as well as a more careful and accurate observation of the whole physique of the child. Nor can an ultimate opinion always be formed at one inspection at any given moment. For nutrition, like its reverse, malnutrition, is a process and not an event. In regard to diagnosis, therefore, the school medical officer has, as yet, neither an absolute standard of nutrition nor a single criterion to guide him. He must form a considered and careful opinion on all the facts before him."

While this conclusion may receive general approval as a theoretical proposition from the great mass of workers in child hygiene, the practical difficulty still remains that many communities have neither sufficient funds nor the necessary number of qualified physicians to make such a careful examination as would select all the children who require additional nutritional care. It is, in fact, for these reasons that the simpler but faulty method of relying on the height and weight tables has risen, and this only because nutrition workers have not been aware of the limitations of the method. Now that we know how serious has been our neglect through a too hopeful reliance on the tables, we must turn to other resources and devices in order to select the children who need special care. Our suggestion is that in those communities where it is still impossible to give every child a thoroughgoing physical examination, selection be made as heretofore of all the children who are 7 per cent underweight, but only as a first measure. These children will be found on examination to be, for the most part, malnourished. Possibly, one-quarter to one-third might have been excluded by the physical examination, but no great harm can be done by their inclusion. But, this entire group of underweight children, it must be remembered, represent only a very small fraction of the truly malnourished children.

To their number should be added an additional number, possibly as many more, who are in need of special care and who can readily enough be selected by parents, teachers, and, even on casual inspection, by nutrition workers on the score of general physical condition. Such physical signs as poor color, indifference in studies, lack of appetite, readiness to fatigue; all of these are good indications of the possibility of malnutrition. These children may well be and often are of good weight as we have found, but it is they who make up the great bulk of the cases which, on careful examination, show defects of nutrition. By combining all of these methods, it is possible that the majority of the cases requiring care will be selected.

The method we have suggested is obviously a makeshift. It is not suggested as ideal, but only as a necessity to make good the deficiency which may well exist in communities where sufficient medical attention cannot be obtained. Reliance on such a compromise will help, but will not give optimum results. Our study indicates that for such an achievement, there is only one method available, and that is, to give every child the benefit of at least one good physical examination a year. This alone will determine what the true state of health of the children is, and which of them require special nutritional care.

DO HEIGHT AND WEIGHT TABLES IDENTIFY UNDER- NOURISHED CHILDREN?

LOUIS C. SCHROEDER, M.D., Attending Physician, Nursery and Child's Hospital, New York City

The whole argument of this paper is based on the assumption that the physician's diagnosis is the only safe criterion for selecting undernourished children. Height and weight standards, therefore, fail to the degree in which they do not select the same group of children whom a physician, experienced in handling children, would call undernourished. So far as Italian children living in congested quarters in New York City are concerned, it is clear that there is a wide difference between the selection made by the two methods and that therefore the commonly accepted norms cannot be relied upon as the sole method of picking out the undernourished children from such a group. Indeed the divergence of results of the two methods is so great that one may well question whether, since these children were practically all examined by the same physician, it may not be as much due to a bias on the part of the examining physician which led him to be unusually severe in his judgment of defective nutrition, as to the failure of the tables themselves. This question can best be answered by stating clearly what standards were adopted in grading nutrition and in pointing out some of the peculiarities in the type of build of these children and the peculiar form which their malnutrition exhibited.

It must first be pointed out that these examinations were made of apparently well children for the purpose of selecting those who required follow-up care for nutrition and other defects. In other words, the examinations were made without any thought of testing the validity of height and weight standards, but solely for the very practical purpose of selecting children who were in need of care. The children were examined entirely without clothes and the average time for examinations was eight minutes.

Height and weight were taken and degree of underweight found and recorded before the child came in for examination. The children were examined, first, with regard to nose, throat, posture, heart and

lungs, and, last of all, for nutrition. Thus the estimate of the child's nutrition was made after a thorough appraisal had been made of all other defects and the physician had a clear picture of the child's general state of health.

It might appear from the results of this study that the physician paid no attention whatever to the child's height and weight, but this was not the case. The degree of underweight was first noted and set down as one of the factors and as an important one, in determining whether the child was undernourished. If a child was 10 per cent or more underweight for height and age, this fact was regarded as presumptive evidence of poor nutrition.

The tone of muscles, and to some extent, that of the skin and hair, were carefully noted. The tone of the muscles was chiefly determined by feeling the arms and legs and noting the posture. Therefore, if the general tone of the muscles, heart included, was poor, a child might be called undernourished, even though only slightly underweight, and, vice versa, he might still be called undernourished even though he had a good weight.

The presence of subcutaneous fat was also a determining factor. A fair amount of healthy subcutaneous fat is one indication of good nutrition; the absence of it produces a loose, dry skin indicative of poor nutrition. This fact was therefore carefully noted and considered in connection with the state of musculature. Obviously, a child exhibiting both poor musculature and poor fat content would be considered undernourished, even though he might be within the limits of underweight.

The color of the mucous membranes and skin was noted as another important evidence of poor nutrition. With a swarthy race like the Italians, this was difficult to judge accurately, except in the lips and in the conjunctiva of the eyes. Poor color, together with poor musculature and the absence of subcutaneous fat, would place many children in the undernourished group.

These tests caught the great bulk of the undernourished children, but there were still a few borderline cases where it was difficult to pass judgment on these tests alone. In such cases, the following signs were regarded as indicative of defective nutrition and helped us to decide where to place such cases: (1) if the child appeared listless and apathetic, (2) if he had physical defects which are indicative of poor nutrition, e. g., a narrow chest and enlarged tonsils and adenoids, which

mean a diminished breathing capacity and incomplete oxidation, causing an impoverishment of the blood, (3) if he had a history of sleeplessness, lack of appetite or nervousness.

In general, the method employed was very similar to the so-called "sacratama" method of von Pirquet. According to the von Pirquet method, musculature, blood content, turgor, and the like, are each assessed and given a definite "weight" in classifying the children. While our method was not worked out to the minute detail suggested by von Pirquet, the methods agree perfectly in principle.

DISTINCTIVE FACTORS

It is clear from this study that a large number of the undernourished children of this district were not markedly underweight and this will be a source of surprise to many. In this connection, one or two facts must be kept clearly in mind. It is to be noted, for example, that the disagreement between the height and weight tables and the doctor's examination is greatest among those children between two and six years of age, a fact to be noted among both boys and girls. One must understand something of the early life history of these children to realize why so large a number of the children of pre-school age were undernourished, even though of fair weight. In the first place, as has been pointed out, there is an abnormal amount of rickets among the babies in this district and it is of a severe character. The sequelæ of rickets can be seen clearly through the pre-school period and in the early years of school life. Fully 25 per cent of the children of pre-school age in this district had marked orthopedic defects which were the result of rickets. The badly bowed legs and twisted backs of these children give them a stunted appearance so that they are, as a group, far below the national type in stature. There is, undoubtedly, also an hereditary factor at work determining small stature. While they are much underweight for age, therefore, they are less underweight for height. For this reason, a standard based on weight for height and age does not work so well.

Again, malnutrition among this group of children exhibits itself less in a thin and emaciated figure than in a low tone of the muscles and the digestive and circulatory systems. This is seen, for example, in the protuberant and distended abdomen which is characteristic of many of the children. This condition is due to a low tone of the abdominal walls and muscles which allows the intestines to protrude and

also to the low tone of the intestinal walls themselves which allows them to distend. The high carbohydrate diet consisting of great quantities of macaroni besides produces gases which distend the abdomen. It is obvious, therefore, that with such groups of children, a standard of diagnosis which is based only on a height-weight relationship, will not discover many children who are seriously undernourished and should be brought under care.

I am in hearty agreement with the statement made by Sir George Newman which is noted at the close of the preceding paper. It has been our belief and a principle in our practice, that malnutrition is not simply a degree of divergence from an accepted weight standard, but that firmness of tissue, the presence of subcutaneous fat, and the process of the development of the muscular system and the condition of the mucous membranes—all these things—as pointed out by Sir George Newman, must be taken into consideration in making an adequate appraisal of a child's nutrition.

DISCUSSION

Miss Maud Brown, Director of Health Education, Child Health Demonstration, Fargo, North Dakota: We all agree absolutely, of course, with Dr. Dublin's position that the weight is only one of the elements of a physical examination, and that basing the diagnosis of malnutrition on weight alone, ignoring all the other elements, is an absurdity. I listened with very keen interest to Dr. Dublin's paper because of the fact that I have for the last two years been engaged in studying the health conditions of a group of 1,400 children of a high class native American residence district who are almost identical in type with the children from whom this weight and height table is made up, a high type of native born American children. The resulting graphs show that the correspondence between children of that type and the weight-height tables made up from high grade American children is somewhat closer than the correspondence between the Italian children and the table made up from these American children. The children were given three physical examinations independently by three physicians, and rated, "superior," "good," "poor," and "very poor." The first two physicians rated them at the close of a complete physical examination. The third physician gave them this nutrition rating only. As a result, 72 per cent of the children who were 5 per cent, or more, below weight for height, were rated 3 or 4 (poor); 28 per cent were rated 1 or 2 (good). Approximately two-thirds of those up to weight for height were rated 1 or 2 (good); one-third were rated 3 or 4 (poor).

HOW FAR MAY WEIGHT BE RELIED UPON AS A MEASURE OR INDEX OF CHILD HEALTH?

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New York City

I ask the privilege of making two or three statements with reference to the position of the Child Health Organization originally, and the American Child Health Association since then, in relation to these weight tables and weight-height-age indices, and also of my position with reference to them.

The Child Health Organization and the succeeding American Child Health Association have presented weight tables. The first was that which I had the pleasure and the effort of preparing and which was adopted by the Child Health Organization. The second one, as I think you know, the revised table for children of school age, five to eighteen years, has been prepared by Dr. Baldwin and myself, and has been published and issued as a supplement to "Mother and Child," the publication of the American Child Health Association. So far as I know, this organization has never authorized the statement that the children 10 per cent or more, or 7 per cent or more, underweight, formed a specific malnourished class. Nor has this organization claimed or made the statement that such a line separated the undernourished children in a general group from those who were well nourished. Personally, I accept responsibility for one chart, issued a few years ago, which states that children 10 per cent or more underweight for age and height have malnutrition, and that this is an important health defect. I do not recall that I have ever thought or claimed that this index segregated all the children, by any means, that were undernourished. I am not claiming in any way that special workers, or many of the general workers in the field, have not in verbal statements, or by implication, given the impression that they thought or believed that this index served as a classification index.

I hope I have made this point clear with reference to the organization and my own individual relation to it.

After extended experience, the Weight-Height-Age index has been accepted, and is being used by a large number of general and professional health workers as the best single, and, at least, initial, test of

the health of children. Any serious attacks upon the usefulness or reliability of this widely employed health test should receive careful attention. Dr. Dublin, Mr. Gebhart, and Dr. Schroeder, in presenting their papers, have rendered important service to those who may study this problem with understanding of the scientific and technical factors involved.

At the same time, their papers are likely to disturb many devoted health workers who are weighing children as an important factor in their health work unless some statements in these papers are carefully interpreted, balanced and qualified.

The statistics which the authors of this paper present from the limited and careful study undertaken in New York City in an Italian population, confirm the impressions and, in fact, convictions, of other workers in the health field who believe that the 7 or 10 per cent line below the standard weight of children for height and age, selects very few children who are not undernourished, or who do not, for that or some other reason, deserve special and careful individual health attention. On the other hand, this study of weights with additional clinical tests, gives added emphasis to the equally confident convictions of many that a very important number of children who are between the standard weight line and the 7 or 10 per cent margin, and even some of those who are about the standard line, present evidences of undernutrition; and that these also deserve very careful attention.

Medical experience, however, has shown that the use of the clinical signs by a single physician (even if an experienced pediatrician) is not sufficient to provide numerically accurate classification of cases. It should be remembered in this connection that Dr. von Pirquet, reporting in this country his important work during the war, in Austria, pointed out clearly that the classification of cases by Austrian physicians who used the sacratama scale of clinical signs (which had been very carefully worked out by Dr. von Pirquet) were not uniform enough to be relied upon for statistical purposes.

Investigations of racial and other standards and variations in weight and height, as well as other characteristics of growing children, are very much needed. But such special racial group or class standards should be subjected to careful study and practical tests before they are adopted in this country as more accurate or dependable than the standards based on many repeated measurements and weights, of healthy native born children of mixed racial stocks, which have been collected for many years.

It is also increasingly evident to those who study the growth and health standards and indices of children that recognition should be given to two or three types of physique in children of the same age and height as soon as demonstration can be made of satisfactory skeletal measurements for such physique classification.

The important principle emphasized by Professor Porter, of Harvard University, and by others, should always be kept in mind—that the desirable standards of weight and growth for children should not be the averages for all children, but the *standards of the superior or undoubtedly healthy children*.

If it be admitted that weight is not an accurate or a conclusive index or measure of health, does this charge destroy the value of weighing children as the initial and most important practical measure or test of children's health? It may be confidently stated that this is not the case, and those who attack this generally, well-established, widely used, and exceedingly valuable introduction to the health program for children, should be warned not to allow the spirit of statistical method, scientific research, or of controversial criticism to weaken the confidence of the great mass of health workers in the weight test which is being used; or to diminish any of the helpful interest which has been aroused in this great national and international program.

GOVERNING PRINCIPLES

The following statements are confidently submitted in this situation:

No single test or sign of child health is accurate, adequate or satisfactory.

Classifying children by a weight standard or measurement is not scientifically or clinically an accurate method of separating those who are unhealthy or malnourished from those who are healthy and properly nourished.

On the other hand, the weight of the child, considered in relation to height and age, is the best single, practical, concrete and, at least, introductory index of health to interest the child, the child's parents, and to serve as a definite record or index for trained workers including the physician or the pediatrician himself. Moreover, the one most helpful and practical index or measure of progress or improvement in the health of the child is the *orderly and normal increase in weight*.

In addition to weighing children, which is used not only by non-

medical health workers but by the general and specially trained physicians themselves, other well-established evidences of growth and health should be employed as far as possible. These include (a) healthy color of skin and mucous membranes, (b) lustre of the eye, (c) good bodily posture and bearing, (d) firmness of tissues, (e) presence of subcutaneous fat, (f) alertness or keenness of nervous and muscular action, (g) normal susceptibility to fatigue, and (h) good condition of digestion and assimilation of foods, and excretion of waste.

Every child should have the benefit of a periodic health examination by a physician (if such physician is available) who is in sympathy with the idea and able to employ the general and special methods of examination with reasonable skill.

In the lack of such physician, or preparatory to examination by a physician, the best available interested persons should make the best possible use of weighing and of other methods of examination.

Those capable of making the general or preliminary health examinations of children, whether nurses, teachers of physical education, nutrition supervisors, social workers, general teachers or parents, should be trained to use as many of the recognized established tests of health as they are capable of using in a reasonably satisfactory manner. Experiments now being conducted are demonstrating, in surprising and gratifying degree, the interest and practical efficiency which may be developed in the majority of teachers within a short time for health inspection of school children, in addition to the other phases of health work and health education which devolve inevitably upon the teacher in this rapidly expanding health program of the schools.

Every growing child, if believed to be normal, should be weighed once a month, otherwise oftener. The height should be taken at least every three months if possible. These measurements should be recorded with the age of the child.

Those who are found, by the use of the various tests or indices of health, to need special attention, should be given the individual attention needed for their health improvement as promptly as available agencies may be enlisted to give the needed health care.

The health care of children which grows, in part, or largely, from the weighing and examining, should be closely integrated with the comprehensive program of health promotion and health education of children which should be fostered by school, home and community.

What may fairly be said, further, with full credit and justice to weighing children?

The use of this universally interesting test of health by weighing has been the most effective introductory measure in improving the health of children which has ever been found. Through the use of this test, and the classification of children into the well-nourished and undernourished—however inaccurate this classification may be—multitudes of delicate, undernourished children have had their physical defects discovered and removed, and have had careful study given to home conditions and the regimen of personal hygiene with desirably great improvement in these influences, and the health of these children has been strikingly advanced.

As a result of this widely used program for child health centering in the weighing of children, great improvement has been made in the attention given to the health of all children in many communities. In some cases this is not true, and those who were 7 or 10 per cent below weight, have received most of the special attention, and other children who needed health care and education have been neglected. In general, however, this special movement has spread with great advantage to most of the children in many of these communities.

Even when such a questionable and inaccurate statement as "Weight control is health control" is used as the slogan in the program of a seriously organized voluntary movement for child health, thoughtful people and students of this problem should proceed very carefully and reconstructively in voicing their criticisms regarding the relative value or danger of such a slogan.

The workers in the health field will be constructively helped not by destroying this central test or introductory step which they use so confidently in the program, but rather by explaining to them its limitations and by helping them to use the additional and supplementary elements and measures which are of decided value.

It may be repeated, then, that criticisms of the great weight index of child health should be not destructive, but they should, from the beginning, be made constructive, by the convincing explanation of supplementary factors, in the promotion of a broader, more thorough, more completely satisfactory basis for this whole health program for all children.

To the investigator who may thus voice a criticism in a single statement: "The use of weight as an index of nutrition and health has not been attended with success," a single counter statement is submitted (consistent with the opinions and statements presented in the

preceding argument) as follows: Immeasurable benefits to innumerable children have resulted from the use of weight as an index of health and nutrition in spite of any of the scientific inaccuracies involved.

DISCUSSION

Joseph C. Palmer, Department of Public Instruction, Syracuse, N. Y.: It seems to me that, as members of this association, we owe a debt of gratitude to these gentlemen for this very comprehensive and expert presentation of a very important subject. It is a subject which has worried me a good many months, for I have been a little in doubt about nutrition and weight and their interdependence. I must confess that I felt in the background of my mind that we were relying a little bit too much on weight tables, so, while they have taken something away from us, to be sure, they have given us back something. It seems to me in this careful physical examination they have given back a good deal, but even here the personal element of the examiner must enter in, for no two examiners measure alike. However, thorough examination is an exceedingly important feature. The individual characteristic of the child is also very important. It is natural for some children to be "skinny" and this we must take into consideration in measuring health. After all, what we are looking for is a standard of health. It is to determine the health quotient of the child. One very important thing that we must not lose sight of is that a child who fails to gain at biweekly or monthly intervals very much resembles an adult who is losing weight. A child who fails to gain in weight must be given careful study and consideration, and the condition must not be treated lightly. So I say that biweekly measurements and weighings are of exceeding importance. These I consider a part of or accessory to the careful physical examination.

Dr. George T. Palmer, American Child Health Association, New York City: What we are seeking, primarily, in the use of height-weight tables is a simple device to separate children into two groups, the well-nourished and the under-nourished. We are after something that corresponds to a piece of litmus paper that will tell which are acid and which are alkaline. Dr. Dublin does not question the expediency of using the height-weight tables, but he does question their soundness as a method of selecting undernourished Italian children. We have heard such expressions as, "Mary, if you drink a lot of milk, your hair will curl." In this case the end justifies the means. We must go further than this, however, and be sure that what we recommend is sound as well as expedient.

Now, if we only could get together all the children in a city, and have then meet the physicians—bring the children and the physicians together—so that a doctor's examination could be made, and we could provide standards so the physicians would agree thoroughly, it might be possible to dispense with the weight table for certain purposes, but the unfortunate part is that we cannot do that in many communities, even in the larger cities that are better organized. It is impossible to bring the physician to look at every school child. Consequently we are stimulated to seek a simpler means to separate, on the one hand, children who need special nutritional care, from those who do not. So one use of the tables is to make the separation so that special attention can be given to what would seem

to be a group of undernourished children. That is one reason for them. But another reason is that weight excites the interest of children. We have testimony to that from innumerable teachers. The question is, whether that method is sound. If the method is sound, I think that, even with the discrepancies reported, Dr. Dublin would be in complete sympathy with the continued use of weight tables and weighing and measuring children, if it would induce children to adopt health habits. Did you ever go into a railroad station with a child and not see it run across to the weight scale? Did you ever see a child who did not want to be weighed, who would not ask for a penny and step on the scales to determine his weight? Not only children, but older people! There is something intensely interesting about watching the pointer go around or the balance arm come to rest. That is the interest that so many teachers have made use of in stimulating children to adopt habits which we can pretty well agree are worth while. You will find from the charts that the selection of undernourished children for the nutrition class by this means has not been overdone, but rather that too many have been missed. I know here in Detroit, in order to get a workable group the dividing line is frequently taken at 15 per cent underweight in order to get a group the health department could handle. It could not handle in a special way fifty thousand children. And these tests simply confirm that no material mistake was made in including in that group children who did not belong there, simply that the program did not go far enough. We want to see the tables used wisely with their limitations clearly in mind. We must frankly recognize that the tables are not an infallible index of undernourishment. In their enthusiasm, there are some, perhaps, who have hurt the cause by making a statement that the reason for selecting children 7 per cent underweight for special care instead of those who were more underweight was, that if they were only a little underweight, they would come up to the line quicker and therefore make a better showing. I heard such a statement made. Now it is unsupported, unwarranted statements, or somewhat superficial appreciation of this subject that hurts many good features in the use of the tables in a child health campaign. I am sure that this association will always welcome any serious contribution to human knowledge on this subject, even if it does make us temporarily halt with a workable plan and think a little harder to develop a better one. Contributions such as these studies of Dr. Dublin and Mr. Gebhart will always be gratefully received.

Agnes Morris, New Orleans, Louisiana: Just a word. For some time I have known the weight table would be analyzed by a scientific research man, by some doctor like Dr. Dublin who has presented this wonderful paper, and I am very glad personally to have had the privilege of hearing him and to understand a little more about weight charts than before. Therefore, our thanks are due Dr. Dublin and I think as a matter of our own education it is a wonderful contribution to this meeting. On the other hand I have used the charts for several years and I want to take up what Dr. Wood said about their educational value. We use them in country schools, and as just said by the last speaker, the children are greatly interested in their own weight. Some grown people are not, but the children take the report home. When Mother finds out that Susie is two pounds less than Mary, she wonders why. Maybe it is because Susie is a nervous type and will not eat her breakfast. If her mother is wise, she will see to it that that child has an

abundant and wholesome lunch. Most people, I guess ninety-nine per cent, may drink milk without injury, and so we say the child who is not up to weight should drink milk for breakfast; sometimes this has resulted in the parents' buying a cow. I suppose Mother milks, but I hope not—I hope Father does that. We published a food chart—on the fourth page of our Monthly—and asked each child to write for one week what she ate on Monday, Tuesday, and so on, bread, vegetables, meat, milk—so much of this and so much of that. This was a help to the country mother who really did not know what or how much her children were eating. It is not exactly scientific—we are not “scientific”—and are very trying to scientific people. We can't always make immediate practical use of the most scientific plan or method.

John C. Gebhart, Director of the Department of Social Welfare, Association for Improving the Condition of the Poor, New York City: I shall be very brief because the hour is late; but I want to gather up some of the threads of this discussion because I believe we have wandered a little from our original theme.

Our purpose in making this study was not to make a wholesale attack on the question of weighing and measuring children, nor on the value of periodical weighing of children as an educational measure. We addressed ourselves to one theme, namely, do the height and weight tables as they are commonly used, identify undernourished children, particularly as applied to Italian children with whom we were dealing and about whom we had some definite data? We found, then, if we took as our standard the doctor's diagnosis, as it seemed to us we must, a great variation between children picked out by the height-weight standard and those whom a careful physician would have picked out after careful examination.

I was very much interested and pleased that Miss Brown has apparently found evidence which seems to show the other side of the picture. We were conscious from the start that we were dealing with a highly selected group of children. These children come from people who are short and stocky. Moreover, we know from five years' experience in this district that these children have a rather unusual history of disease and defects. One has only to go into the clinics and see these children to realize that one is dealing with an unusual type of child.

I will sum up briefly the points which I think have already been covered in the papers. It seems that underweight and malnutrition are very far from being synonymous terms; height and weight norms may select children who are underweight, not necessarily children who need nutritional care. We found that the 7 and 10 per cent limits of these tables missed about 75 per cent of all children who were actually undernourished, for that proportion would have been missed if these standards had been relied on rather than a doctor's examination. A table made up of average weights for age of Italian children, on the other hand would have missed 50 per cent of the undernourished children. A great deal of nutrition work is being carried on among Italian children of the type we have studied. It would appear, therefore, that the results of this study must have a fairly general application to nutrition work. It does not seem quite fair to us to leave out of consideration those children who fall just above the 7 per cent or 10 per cent line and provide no care for them. It does not seem to us very helpful, preventive work to rely solely on a method which does not include borderline cases. Borderline cases in our experiment are selected by physical examination which takes into

account posture, color, etc. That whole group of cases would be missed if we had relied entirely on height-weight norms. If we are going to do real preventive work we cannot afford to leave out such a group entirely.

Moreover, it seemed to us that the unquestioning reliance on these norms has a retarding effect on the nutrition movement throughout the country. I am not at all concerned whether the Child Health Organization is responsible for establishing these standards. It is evident that they are so accepted throughout the country. We have only to go into the clinics everywhere to realize how far these standards are accepted as the last word in diagnosing malnutrition. I happened to be in one large clinic, for instance, talking to the director, when I noticed under a piece of glass a height-weight table, and also on his desk instructions for its use. It read something like this, "All children 7 per cent or more under these weights are undernourished." Recently, when I was in one of the largest clinics in New York, I found that the routine procedure for all children admitted to that clinic is to consider all the children who are 10 per cent or more underweight, according to these standard tables, as undernourished. I asked the doctor in charge if there was any further examination made of those children. He said, "No, we are not especially interested in that." If they are 10 per cent underweight that is as far as they go. And yet in that clinic some of the ablest and most promising young medical men in the country are being trained. The complacent acceptance of these norms is heading off the further study of the underlying problems of malnutrition.

I was quite interested in an editorial on this very question in the *American Medical Journal* for October 15, 1923.

It seems to us after going over this material that there lies ahead of us an important field we must explore. We need many more such studies, not only of Italian children, but of other leading racial groups, not only to test out the norms but to gain a clearer insight as to what really constitutes malnutrition. One of the most interesting facts brought out by this study was that these children not only deviated from the normal in type of build, but that they have a particular form of malnutrition which is not widely recognized and not found in general communities.

In conclusion, we repeat that this study is not for the purpose of attacking the policy of using weight as an index of nutrition. The value of taking periodical measurements as part of any health program, I think, is obvious. We recognize that such a procedure has an important place in any sound health program. Certainly this can not be accomplished without some attention to norms of weight, height and build. Moreover, we think it very important to observe carefully the growth of the child, for certainly every healthy child grows and gains in weight. I think there can be no question but that a great deal of benefit has been derived from the weighing campaigns carried on throughout the country during recent years, but we also find that the movement is fraught with danger if we rely too thoroughly on weight alone and forget the other more important factors in the complex problem of malnutrition.

**HOW CAN SCHOOL BOARDS AND SCHOOL ADMINISTRATORS
BE CONVINCED OF THE NECESSITY OF HEALTH TEACHING?**

Round Table

**SALLY LUCAS JEAN, Director Health Education, American Child Health
Association, New York City, Presiding**

HOW CAN SCHOOL BOARDS AND SCHOOL ADMINISTRATORS BE CONVINCED OF THE NECESSITY OF HEALTH TEACHING?

DISCUSSION

Miss Jean: We are all convinced of the necessity for health teaching, but we know that there are many sides to the problem and some of us are facing one and some another. It seemed wise to ask various individuals who have dealt with those problems to tell us how they have secured results.

We have asked Mr. Courtenay Dinwiddie, the Executive of the American Child Health Association, to tell us how the social organizations of a city can best be utilized to bring about health teaching in the schools of the community.

Courtenay Dinwiddie, General Executive, American Child Health Association: In our thinking of the school and health of school children, we have not begun to appreciate the place and the power of the parents and of citizens generally. One of our next big steps in attempting to secure health for school children is to realize that power to the fullest.

The attitude of most of us who are not public officials, is to elect them and tell them, "There is your job, go to it," and then to forget them. When something happens we do not like, we jump on them with both feet. I have been a public official, and I know that that is what usually occurs. You seldom have anyone come in really to understand your work, to praise it or even to give you a constructive criticism. Now that is all wrong. We must reverse the policy of ostracism and see how far we can go in understanding, aiding, and supporting our public servants, especially in the schools.

One thing that has helped to bring the message of health to the schools has been to undertake a fairly simple piece of work, such as providing hot lunches in the schools or weighing and measuring the children, and from this to lead into a broad and balanced school health program. But even in such a simple piece of work we must remember that, after all, a community, if it is to be a community, can not be a separate lot of individuals each doing exactly as he pleases. Instead of working apart, it is far better from the very beginning to consult with the school people to bring them into the plan and program and to have them feel and be a part of all that is done. If the principal and teachers, the superintendents of schools, and, where that is feasible, members of the school boards, are watching and taking part in whatever we do, it is perhaps slowly but surely going to influence the whole school system.

Much health work in the schools leads nowhere for the simple reason that no one has seriously thought of what the next steps should be. An attractive health play by the children may be forgotten and leave nothing behind it, or may serve to crystallize sentiment behind medical examinations, weighing and measuring the children, hot midday lunches, competition in the practice of health habits or a campaign for a school nurse, as the next step toward a complete program. And if we are really looking ahead, we shall never forget that the sooner we can successfully place responsibility for health education in the hands of the teachers themselves, the surer we shall be of results. The teachers are those who are molding the child's thoughts all day, every day.

We cannot begin to realize the full value of the school health work, if we do not think in terms of more than just the schools. The child is in the school only during the school hours. It is true that is a good part of the day, but remember the influences to which he is subject on the street and in the home. Of what value is it to build up his health standards in the school if the other forces in his life are tending steadily to break them down? Therefore, in this school of life to which the child is going, let us include parents together with all special workers, with the children as members of the teaching staff. And there is no better way, in my judgment, than to have the parents, physicians, nurses and other community leaders meet in neighborhood and parent-teacher associations, study the work of the schools, contribute what they can to it, and see to it that the homes and the schools are supplementing each other and giving all that they can to the child's sound development. In this way the parent gains a totally new conception of the aims of the school and of the vital part that he or she is playing in shaping the child's future through the home influence. The teacher gains courage through knowing that her work is understood and supported. Where either is weak, there is excellent opportunity for helpful stimulation or the correction of more serious conditions.

Where such neighborhood associations really function effectively, they come nearer than almost any other thing that I know of, to restoring to our national life those fundamentally democratic and educational values that were contributed by the old New England town meetings.

Frank Cody, Superintendent of Schools, Detroit: Detroit has put across its health program, in the first place, by approaching it in a perfectly human way. Of course it is sometimes hard to get superintendents and teachers to operate in a human way, but I find the public always does. I think, perhaps, in Detroit that we started right. We started with the parents. While our school program was organized by the Health Department in the schools, still the demand for appropriations came from the outside. I do not believe that anything is going to succeed in a school system that is completely initiated by the school system itself. First there must be outside influence and outside pressure in order to get it started in the right way in the public mind. Now, the point I am trying to make is this: It has already been brought out that through our Parent-Teacher Association and their splendid department of health education, and the Health Education Department, we were able to present their program to the physicians and to the city and get their approval. To me, that is a thing that always must be done. We insisted that these matters be brought before the Medical Association of the City first for

its approval. The good old family doctor is a tradition in America and he must be respected. He has the confidence of the people, and it must be done, not by the teachers themselves, not by or through your agencies, but, as already brought out, by the Parent-Teacher Association.

In Detroit we have had no particular trouble with this health program. I think Miss Ethel Perrin has handled it remarkable well. Any suggestion or any criticism that has been made, she has been ready at all times to meet.

Only yesterday morning an old physician walked into my office and said, "You are making a great mistake in health education."

I said, "What is the matter?"

He said, "You are having lessons in physical education in the morning; we cannot stand for that. You are having them right after lunch; we cannot stand for that."

"What did you think we were doing?" I asked.

He said, "Fifteen or twenty years ago I was in Germany and we didn't think of doing anything like that."

"Do you know or realize that things have changed in fifteen years, and German education is not the education of America?" I replied.

I suggested he spend two hours in the school and then give us his suggestions. He had an idea we were still going on with the gymnastics of twenty years ago. So the point I make is, if we always keep the public fully informed, we are bound to get along. The public has to be dealt with. We must show our program to the people. That is the business of the school superintendent in city schools, after all, to see that the public knows just what the program is, what he is trying to do. As I said before, in Detroit we have been very fortunate in having in this department a woman who has realized that very thing, who has given these public demonstrations and has succeeded in getting the physicians of the city back of our program. I believe, therefore, that the Health Department of the city should be responsible. That is where it belongs.

Now, we have here today a splendid system of cooperation. The Health Commissioner is doing the very things we want him to do in the matter of health inspection and examination. On the other hand, we are doing all that he wants us to do. So I think the responsibility always remains, for getting up a fund, securing an appropriation, with the Board of Health. If we have succeeded at all in Detroit, I think it is because we have been able to cooperate with all these other agencies that have been responsible, in the last analysis, for the welfare of the children.

Dr. Walter H. Brown, Mansfield, Ohio: I am not going to spend any of the short time I have to speak in discussing the desirability of bringing to bear on school boards, superintendents, or the administrators of school boards, pressure from the outside. I am going to take just a few minutes from another point of view. I believe that in the technical field of health, production has far outstripped distribution. And the thing I think we should consider is how we can find practical ways and means of distributing results of scientific medicine. So I want you to think for just a moment with me of the idea of selling to the school administration, a program of health education.

In the first place, how you should go about it. We hear so frequently that technical workers, when they come to present a program to the Board of Education, present it in language and form that is not understood. It is all very well for us to talk in a meeting of this character about the technical aspects of our work and to use technical terms. But our administrators, whether they be school boards or superintendents of schools, are thinking in other terms. So, I want first to emphasize that we should translate our material into such a form as will be understood.

I do believe if we go to the school board with a well thought out program, in terms they understand, we can sell it to them: Do not be dissatisfied because this group of individuals do not accept that program at first. My advice to you, or anyone else wanting to get the health program in the school system, is, first, study your board of education, find out what they know about the subject; present your plan in terms of the educational group; and be ready to carry it out efficiently at once. Then the next time you go before that board of education, they will listen to you with interest, knowing that if your head is among the stars your feet are on the earth.

Miss Agnes Morris, New Orleans, Louisiana: I want to say something concerning the rural districts. It would seem everything applies to the cities. I have listened to the things you are doing and the people you are getting to do it. Now, when I worked in the rural districts about ten years ago I found that the people were very much astonished in those days to have a woman come and talk to them. I nearly always had a crowd. I was organizing what are now called parent-teacher associations. One incident may be of interest—the meeting—twenty miles from nowhere. I had spoken three times that day. I had to drive all the way in a buggy with a mule. The roads were very bad, and it was slow traveling. The building where we held the meeting was lighted with oil lamps. Along one side of the room were the desks that the children used in the day and in the middle of the room was a stairway. There were about two hundred and fifty people present. Along one side were quite a few quilts on the floor and the babies not in their mothers' laps were asleep on the quilts. I proceeded to talk organization and what the parents could do to help the school—their school. I used to think I was something of an orator, but I know better now. In the midst of this "oratory" a great "commotion" arose in the yard and everybody ran downstairs. Do you know what had happened? A dog fight. Do you know what that meant? Everybody had to go downstairs because his team was down there, and if the mules got away, there would be no way to go home. I was vexed—the "effect" was lost, but of course the mules and horses had to have attention. If we could get the health program in the minds of the people of the rural communities as intensely as that dog fight, we would get something done. What we are doing in the rural districts has been made possible by good roads. It is much easier now with the flivver and good roads. Did you answer the questionnaire that was sent out, asking who are the seven great men in the United States? Did you name Ford? If you had traveled much in the country, you would have put his name on the list. You know what we should do. Where are the trained men and women of the medical profession, the teaching profession, the nutrition people, and the public health workers,

who will go to these communities and stay there? Where are they to be found? Those are the people we need, and they are the people we will have to have if we are going to put through this program in the rural districts. May I tell one little yarn?

It is a little like this. The people need to know more about how to keep well and this is the story. There was an old maid, Miss Mattie, a confirmed old maid. She had all the characteristics the old maid used to have. So the people were a little bit afraid of her, especially the married women. They would say: "We hear she is going to be married. Won't you ask Miss Mattie?" No, Mrs. Brown would not—Mrs. Jones would not. Finally one married woman found courage enough to ask Miss Mattie. She said, "Miss Mattie, I hear you are going to be married." Miss Mattie said, "No, child, it is not true, but thank God for the rumor."

Dr. J. L. Blumenthal, Bureau of Child Hygiene, New York: I was not going to take up so much the work we are doing in New York City as to speak about the methods we might adopt to interest physicians all through the country. It is true that we have a very great interest in health work in New York and we have gained the cooperation of many physicians in it.

Before launching into that subject, I want to say that possibly the best way to interest physicians is through such meetings as the American Child Health Association is holding here just now. I do not think any of us should leave this city without expressing the pleasure and gratitude we have had in attending meetings in this wonderful city of Detroit, and expressing to the American Child Health Association officials our congratulations on the splendid work which they have done in organizing this meeting for us. There have been practically no special sessions, yet every one of the sessions has been marvelously attended. Each one has been most interesting and the discussion most helpful. If I might suggest one point of criticism, it would be that we have not had time enough for general discussion. I think if we are going to have American Child Health meetings we shall have to extend them and have a four to five day program instead of only three days. If you do not all want to express your appreciation in the spoken word, write it. Let your home folks know the splendid work you have heard about—work that has been going on all over the country. In that way you will interest not only your doctors but other public health workers who have not had the opportunity to come here, and your public in general. Put it right up to them. As Mrs. Meloney said the other day: "Shout your heads off." Preach it constantly until next year's meeting and then start it all over again.

I haven't much to say about the doctors, because they are already interested. Those of you who read medical journals and nurses' journals, through scientific or professional interest, will notice the number of "D. P. H.'s" occurring after the names of those who write the articles. There are a lot of budding doctors throughout the country who are taking positions in health work, and most of them are making good. Where are these doctors in public health coming from, and why are they? The answer is, the doctor is interested in public health work, not only in one city or town, but all over the country. Yale, Harvard, the University of California, New York University, Columbia—everyone of them has courses in public health where they are teaching the coming physicians what such work means. And the work is not confined to the United States. My neighbor on the left has just

told me that in the college in Halifax, they have a full-time Professor of Public Health who is also Director of Public Health Service for the city, and that they have an entire building devoted to this work. There are twenty-five students taking the course and they are going out to spread the gospel all through the provinces of Canada. That is good work—splendid work.

I do not think we need pay too much attention to the doctor of today, because it is really the coming physician who is going to make public health work what it ought to be. The doctor of today is, of course, a problem. We can interest him to a certain extent. As someone said to me, "the best way to interest him is to step on his toes." Well, I think that might be all right—get him mad and you may interest him to a certain extent. But certainly I do not think we ought to step on his toes too hard. Step with your toes rather than your heel, if you are going to step on his toes at all—enough so that he will feel the impression but so it will not actually hurt. There are a good many ways by which you may interest the physician, but as time is limited, there is just one point I want to bring out before I close. Go to him with your problems, and make it a point to interest him. Tell him you have been working with a given family of his for a number of years, and you feel that something could be done in the way of improving health conditions in that home. If the doctor would recommend removing Jimmy's diseased tonsils or getting glasses for Nellie or something of that kind, it might help the family. Get him interested. Get him to help. I feel if you approach it from that angle, discussing it with him, making him feel his own importance, you will get results. Get the interest of the old-time physician. We do not need to worry about the coming physician. We have got him already.

I have said that one of the ways to interest physicians is through these American Child Health Association meetings, but you must remember, too, that your local societies can do very much to further public health work. I would therefore urge you to make every effort to bring before not only the medical societies but also parent-teacher associations, chambers of commerce, civic clubs and the like, reports of your work, interesting facts concerning it and possibly, too, have some of the more prominent members of the community who have helped, also discuss the work at these meetings.

Dr. William DeKleine, Health Officer, Saginaw, Mich.: I do not think that any one can prescribe a formula for the proper way to approach a Board of Education on matters pertaining to health education. The members of a Board of Education think differently from us about the importance of this subject. Before we can approach them in a way to expect results, we must get their point of view. I think the story Dr. Hastings told this morning applies very well. In that, you will recall, the Irishman failed to catch his train, not because he did not run fast enough, but because he started to run too late. I think many of us start to run too late to catch the point of view of the Board of Education.

I think Mr. Cody has stated the case about as well as it can be done. The average Board of Education will not go in advance of what the public wants. The public has to be approached before we approach the Board of Education. If I were to give a formula for the best way to convince them, I would put it this way: Get the general public interested in health work first. Do some concrete piece of health work in the community, that the people can see and understand and will be

interested in; then the Board of Education will be interested too. You can at least make some demonstration of health work that the public can understand and that they believe in. If the public understands, then I do not think we will have any trouble with the Board of Education.

Then as Dr. Brown said, go to them with a well thought out plan; give them a clear picture of what you believe in and what you want, and you will not have any trouble to interest the Board of Education. I think our difficulties lie, if we have any, in the fact that we have failed to first educate the public in the importance of health. In such matters the average Board of Education generally does not go beyond the demands made upon them by the public.

This is the health officer's viewpoint of the best method of approach to the subject.

Dr. Frances Sage Bradley, Arkansas: It takes a lot of courage for me to appear again before this audience. I am sure no state in the world needs nurses as Arkansas needs them, but at least we can do much through the teachers if they are properly equipped. It is manifestly unfair to pass laws requiring teachers to inspect their children annually, and then make no provision for their training in that work. I believe that any teacher competent to hold a teacher's certificate, may be trained to recognize certain deviations from the normal in the physical condition or in the behavior of her pupils, and I trust the time is not far distant when this may be done, thereby giving us not only well trained teachers but better balanced children, who often carry the gospel home to their parents in the most practical way.

Dr. R. L. DeSaussure, American Child Health Association, Baton Rouge, La.: I come from the country. I have one concrete idea to submit, the telling of which can easily be put into two minutes. You may take it for what it is worth. The idea is that the county health officer in the rural district is the foundation stone on which is supported the whole structure of public health. The county health officer sinks his roots in the soil of his county, and the tree of public health slowly but surely uprears its head, not given to rapid vegetation like a flower, but to sturdy growth like an oak, its boughs sheltering from the scorching heat of disease, the tender flowers of infancy and child health—and that, I think, is the function of the American Child Health Association. We must stick together. Some men stick together like the school teacher's husband—the school teacher that married a man who had been accustomed to stay out late at night. She told him she would marry him but he must be home by nine o'clock every night. For two months he obeyed, then one night he did not come home until ten o'clock. She wanted to punish him. All her experience had been in a class room, so she made him write fifty times, "I must be home at nine o'clock." Three months passed by, and one night he did not come home until twelve o'clock. His wife was in tears.

He said, "You must be reasonable. My car broke down in the country, there was no telephone, and I worked on it until eleven o'clock, and that is what made me so late."

She said, "I am not crying about that, but about the way you men stick together. When you were not home by ten o'clock, I telegraphed three of your old friends who live in different parts of the state, and the answers came ten minutes ago."

She handed him three telegrams, and all read exactly alike, "Don't worry about Sam, he is spending the night with me!"

Mrs. Laura F. Osborn, President, Board of Education, Detroit, Mich.: An old Southern recipe begins: "The way to cook a rabbit—first, catch the rabbit." To convince a school board of the need for health teaching—first secure a school board which believes in the necessity for such education—the time to find this out is prior to election or appointment. Public sentiment will convince the most recalcitrant board. This may be secured through tireless efforts through press, clubs, parent-teacher associations in season and out of season.

Mr. N. H. Pearl, Detroit, Mich.: Vital statistics are showing us the great possibilities in saving lives, prolonging life, and therefore increasing health, efficiency and happiness. Everyone is talking health and believing in it. This includes school boards and school superintendents. They are supporting a health program, even a general one. It remains for those of us who are working in the health field to evolve a broader and more specific plan that will show definite results. We shall then be supported to the maximum, not only in approval but in time and money, as the value of health is becoming more evident.

There are nine factors through which health should be taught. These are food, rest, air, exercise, cleanliness, clothing, posture, right use of leisure and state of mind. Of these nine we have made the most definite strides toward health in two, cleanliness and fresh air. In fact only these two have really been built into our consciousness and these are the two for which we assume a moral responsibility. We find many people who seem to feel "honor bound" to keep clean and breathe good air. We make no alibis, we have no excuses. But for the other seven we all seem to have alibis and excuses—we haven't time to exercise and to rest sufficiently and properly; to study and practice right food and posture habits; to rightly use our leisure time; we worry and do other things to unbalance our state of mind, and style governs our clothes; and the strange part of it is we think we have perfect alibis for our failure in these lines of health. It remains for the school to build these things into the moral consciousness as has been done with cleanliness and fresh air.

The measures of health teaching lie in showing improvement in five general conditions: securing normal growth for all children; controlling disease; preventing and overcoming defects; developing normal physical ability in each child and controlling and directing energy and vitality.

Growth is definitely measurable. Illness can be measured in absences from school. The decrease in the numbers and kinds of defects is a definite measure of health teaching. Normal physical ability bears a definite relation to health and is easily measurable. The amount of energy and vitality of the individual is a definite index to his health.

An investigation in Detroit shows that out of 100 pupils absent, 60 to 70 are absent for illness. When the absences in Detroit average 10 per cent of the total enrollment it means that out of 140,000 pupils, 14,000 are absent every day, of which 8 to 9 thousand are absent on account of illness. Lessening this absence on account of illness is a very definite measure of health teaching and this is the kind of evidence that will secure unlimited support for health teaching from school boards and the public generally.

Dr. A. M. Carr, Board of Education, Trenton, N. J.: I do not have to sell to the Board of Education the value of health education in the schools, because it has already been sold. Dr. Wilkes, who preceded me, sold the Board for three years on a solid foundation of health and health education. I wish to pay that tribute to Dr. Wilkes. The Board is sold because the Parent-Teacher Associations, teachers, children and public are sold to the idea. That is the way it can be done.

All we have to do now is to keep on selling the Board of Education the idea by doing a thorough piece of work without dissipation of effort.

Dr. Thomas D. Wood, New York City: This brief statement is offered in the hope that it relates to the topic of this luncheon. It appears to me that very much of the success of this convention has been due to the favorable atmosphere in this city, to the interest of the people. They have turned out with their resources, their machines, their cooperation, and they are helping to sell this great program of child health to the country by their hospitality and their generous treatment. This illustrates to me the principle of exchange—of being generous in giving wherever we may to this idea, this program in which we believe, and to which we are devoting ourselves. We cannot measure it. Even in a health association we ought to have belief and faith in things that we cannot measure.

THE PROBLEM OF EARLY INFANT DEATHS

General Session with the Child Welfare Section of the National Organization for Public Health Nursing

WINIFRED RAND, R.N., Director, Child Hygiene Division, Community Health Association, Boston, Mass., Presiding

Miss Rand: I have always thought that it was easy to gain the attention of the children by beginning, "Once upon a time," and I believe that I can use that same device this morning with this group because any group which is gathered together because they are interested in children must still have enough of the child in them to be caught by the same device.

Once upon a time an association was formed with a very long name. It was called the American Association for the Study and Prevention of Infant Mortality. Since that association was formed in New Haven, about fourteen years ago, certain things have been accomplished as Mr. Dinwiddie said on Monday morning. The infant mortality has been lowered, but, as Mr. Dinwiddie also said, we still must keep our lights trimmed for further effort. That association with the long name eventually changed its name to the American Child Hygiene Association, and last year we laid on the funeral pyre two organizations, the American Child Hygiene Association and the Child Health Organization of America because we believed that the Phoenix that would rise from those ashes, would rise to greater heights than either separate organization had yet achieved.

During the first two days of our meeting here in Detroit, we have been inspired with the joyousness in child health, the positive side of the picture. We have heard of the health of the pre-school child, the school child, and we have been beginning to hear of the parent. It is really with almost a feeling of sadness that I have to ask you to turn your attention this morning from the positive and joyous side of health which we have heard about for the last two days, to a room in our house of health which we still have to set in order.

It is true that we have lowered the infant mortality rate, but that lowering has been brought about in the period from one month to one year. No one who has looked over the death certificates of a city can help but be appalled at reading, under the column entitled "Age at Death," "stillborn; one minute; one hour; one day; one week." Baby after baby in the course of a year lives no longer than that. What is the matter? What must we do? We are all interested in the problem; doctors, nurses, the private organization, the official organization, have all been doing something, but we are either not doing enough, or, are we not doing right what we are doing?

We turn this morning, first, to the medical profession to discuss this grave problem which we are facing, and it gives me great pleasure to introduce Dr. Cornell, of Chicago, who will give us the first paper on, "How to Reduce the Mortality Rate in Early Infancy."

HOW TO REDUCE THE MORTALITY RATE IN EARLY INFANCY

EDWARD LYMAN CORNELL, M.D., American College of Surgeons, Chicago, Ill.

The general public has not demanded that fetal mortality be reduced. This may sound like a startling statement, but it is true, nevertheless. People have not been aroused sufficiently. A small percentage of the public—physicians and welfare workers—are awake to the situation. Schultze, in 1877, estimated that 5 per cent of children are stillborn and 1.5 per cent die very shortly after birth, the result of trauma of labor. Holt and Babbitt found 4.4 per cent stillbirths in 9,747 viable children at Sloane Maternity Hospital (1915). In forty years the mortality rate has not been reduced appreciably. I repeat, the fault lies primarily with the general public; the remedy lies with it. As soon as there is an awakening, the mortality rate will drop. I will endeavor to lay before you the causes of the high mortality and outline a method to combat them.

Venereal disease is probably the largest single factor in producing stillbirths, miscarriages and weaklings. This cause is receiving attention now since the world at large was aroused to the dangers of venereal disease during the war. It is too early to note much improvement from this source, but inside of ten years we should see good results.

The second largest factor is found in women physically unfit to bear children. Is it surprising that the underfed or diseased woman should have a miscarriage or stillbirth? Women suffering from kidney trouble, heart disease, alcoholism, tuberculosis, etc., should not become pregnant. The problem is, how to prevent it. Again, if they do become pregnant, how can we control them so as to insure a living offspring and a healthy mother? Not infrequently I have patients report in the first pregnancy with high blood pressure or infection in some part of the body. The fetal mortality in this group is large. The maternal mortality, fortunately, is not so large, but large enough. These women respond readily to the suggestion that they put themselves in good physical condition, with the result that a future pregnancy ends successfully.

The lack of prenatal care is another important factor in the high

mortality rate. The average woman does not report to her physician until she is well advanced in pregnancy; in fact, many do not report until a week or two before delivery. If asked why they did not report early, the usual response is that they did not know it was essential, or that some older woman had told them it was not necessary as pregnancy and labor were normal functions and nature would take care of them. It seems to be an inborn habit with women, especially of foreign extraction, to consult a physician at the last moment.

By many, labor has been considered a normal process for many years. Most obstetricians realize that such is not the case. As a matter of fact, most labors are abnormal. Inter-marriage of races, in this country, at least, seems to produce more pathology. In most maternity hospitals abnormal labors are on the increase. Failure on the part of the midwife or attending physician to recognize impending dystocia early accounts for many fetal deaths. Failure on the part of the pregnant woman to seek prenatal care and to have pelvic measurements taken is in part responsible.

Another factor in raising the infant mortality rate is lack of instruction in the breast feeding of babies. Many women feel that social obligations (card parties, teas, dances, etc.) are more important than nursing a baby, hence they insist on feeding the baby artificially almost from birth. Then, again, many mothers lose their milk from over-work, under-feeding or improper instruction.

A few cities are awake to the importance of instructing women in breast feeding. Minneapolis, perhaps, is foremost in this respect. This city, by the way, has next to the lowest infant mortality rate (56) among twenty-five cities with a population over 250,000. They have an organized campaign to increase breast feeding, and it works, too.

The importance of breast feeding may be realized when the Children's Bureau states that "of the 192,212 months lived by infants, studied in the first nine months of life, 57 per cent were lived by those breast fed, 18 per cent while partly breast fed, and 25 per cent while artificially fed. In other words, during the first nine months, 870 deaths of artificially fed infants occurred as compared with 181 that would have been expected at the rate of mortality prevailing among breast fed infants." (Editorial, *Journal American Medical Association*, Jan. 6, 1923.)

Lack of preparation by midwives and the medical profession is a factor in the rate of infant mortality. Just how much this enters into the subject is hard to estimate. The public has not demanded many

specialists in obstetrics. The American Medical Association's Directory lists 146 purely obstetric specialists in the entire United States while 1,659 include obstetrics in their practice. This means that only 146 men were available to take care of 2,500,000 births, or one expert to 17,000 deliveries. This would not be so terrible if the men were equally distributed, but more than two-thirds of the obstetricians are east of the Mississippi River. Hence the women in the vast western country are without expert advice, except in the larger cities. In the field of surgery 3,177 physicians limit their practice entirely to this branch, while 6,810 practice surgery. In the latter field the public has demanded service and gets it. The inevitable result of the lack of demand is that few physicians will devote themselves to the arduous tasks imposed by obstetrics, consequently they pay little attention to the study of the intricate subject.

From a purely commercial standpoint one could expect as much. The average fee paid by women today for a confinement case is around \$50. This includes prenatal calls, laboratory work, delivery of the child and more or less postnatal care. This hardly covers the "overhead" on a case, let alone a profit. The family physician does obstetrics, not because of the immediate profit, but to "hold" his patients. For such fees few men can put their heart and soul into the work, especially in view of the fact that the average fee for appendicitis is over \$100. In appendicitis, the diagnosis, operation and after-care do not extend over a period of a month; in obstetrics, the case may be under observation for six or seven months. No merchant will continue to sell an article on which there is no profit and no demand. No laborer will work long at a job where he cannot make a living and a profit. Educate the public to pay surgical fees for obstetrics and to demand expert service. The physicians will respond quickly, much in the same manner as they have following the tuberculosis campaign or the introduction of the X-ray.

Social and economic conditions of the parents play a part in infant mortality. Dresel and Fries (*Journal American Medical Association*, Nov. 25, 1922) find "When there is a high birth rate, there is often a heavy child mortality. The mode of living exerts a marked effect on child mortality. The income, housing conditions, disturbed social relations between mother and child, owing to the necessity of mothers seeking industrial employment, along with the resulting undeveloped sense of responsibility and suppressed desire for a more normal, healthy existence, with consequent careless modes of living, exert

a harmful effect on conditions of growth as affecting children." Forbes (*Lancet*, Mar. 4, 1922) states that the infant mortality among the rich is less than half that of the very poor.

The medical profession needs little to stimulate it. The obstetric specialists have been awake to the high fetal and maternal mortality for centuries. Various attempts have been made by men to raise the standard of obstetric care and obstetric teaching. It has been a long, uphill fight. Boards of trustees appropriate less for the obstetric department than they do for any other department; in fact, many times it is less than the money appropriated for maid service. The delivery room is in a dark, out-of-the-way spot in the hospital. Instruments discarded by the surgical division are relegated to the maternity service. The nursing service is inadequate or wholly lacking. Obstetric cases are interspersed with medical and surgical cases. The nursery is crowded, improperly manned and many times lacking altogether. This is not the fault of the medical men. It is the fault of the Board of Trustees and the public behind them. Educate them both.

ADVANCE IN OBSTETRIC CARE

It is gratifying to find that many hospitals are awakening to the importance of the obstetrical department and are slowly improving it. Along with this improvement they are asking for better obstetricians. It is noteworthy that physicians are taking postgraduate courses in obstetrics. These men are not all located in the larger cities. Medical schools have made many improvements in their obstetric teaching, with the result that recent graduates are much better grounded in this subject. John J. Sippy (*Public Health Reports*, Apr. 14, 1922, p. 875) has aptly stated the situation when he says: "Doubtlessly, careless obstetrical method plays its part, and a not unimportant one, in deaths of both mothers and infants; but no amount of faultless technique can repair or anticipate organic defects and damage wrought by months of neglect. The problem confronting the medical profession is not only that of reducing the number in its own ranks of those who are incompetent, unfitted, careless, or criminal in the care and treatment of motherhood, but in being able to teach, through social agencies, the duty imposed upon the expectant mother, of making a scientific preparation for the ordeal—an ordeal which involves not only life for herself and her infant, but the welfare of the family. Communities and hospital Boards must be brought to realize their responsibility in providing

lying-in facilities such that no mother, in whatever social condition, need suffer for lack of them."

Social agencies are doing splendid work among the poor in raising the standard of obstetric care and decreasing the infant mortality rate. The only trouble is that they do not reach all the public. The great middle class and the rich, both of which are ignorant of proper prenatal and postnatal care, are not touched. These more than outnumber the poor. I have always felt that these classes needed as much if not more instruction than the poor. These people form the great mass called the general public and are the ones we should endeavor to reach. The problem is how to do it. We have the means at hand. All we need is coordination and cooperation.

We have the social agencies, the boards of health, the infant welfare societies, the newspapers and magazines and the expert obstetricians. Why not start a campaign like that waged against tuberculosis and now waging against cancer and venereal disease? Why not issue a small booklet with each marriage license? Issue instructions to both prospective husband and wife relative to the importance of the care needed in obstetrical cases.

It is estimated by Anna E. Rude (*Journal American Medical Association*, Sept. 22, 1923) that there are 45,000 midwives in the United States. The number of births attended by them varies from 48 in Mississippi to 2 in Nebraska. Undoubtedly a large percentage of stillbirths and fetal deaths occurring shortly after delivery could have been prevented if proper medical aid had been secured early.

It is impossible to do away with the midwife entirely at present. We should, however, control them by licensing them and following up the cases they deliver. If it is found that any midwife is having a high puerperal morbidity or high infant mortality or morbidity, the license should be revoked. Courses of instruction should be provided so that their knowledge of obstetrics could be improved. The establishment of prenatal clinics in foreign settlements should be encouraged. The confidence of the people should be gained through their ministers and priests.

This plan has worked successfully with the Chicago Lying-In Hospital and Dispensary. In the Stock Yards district of Chicago the Poles, Bohemians, Italians, etc., are having prenatal care in greater numbers than when the clinics first started. It was an uphill fight at first. Some of the women attend the clinic and have a midwife deliver them. We

do not encourage this arrangement, however, but we do not refuse to take care of them. The competition thus developed between the clinic and the midwife has had an encouraging effect on the efficiency of the latter. The methods introduced by the clinic are talked about by the patients and at times quite heated discussions result. This is what we need to arouse the foreign public to the necessity of better obstetrics.

Prenatal care is gradually coming into its own. Recently this department of medicine has received added impetus owing to the wide discussion of the Sheppard-Towner bill. Prenatal care is worthy of greater publicity as a large number of babies are lost by failure to evaluate properly pathological conditions present in mothers previous to labor.

When one speaks of prenatal care, the thought of a free clinic immediately comes to mind. This should not be. It is a fact, however, that the free patient in an obstetrical clinic receives better prenatal care than does her paying sister in the hands of the average physician. It is to be regretted that the average pregnant woman is left to shift for herself, the result being that she obtains a great deal of misinformation from solicitous neighbors. Verbal instructions given in the form of a lecture at the first visit are practically useless because so much information is crowded into a short conversation that the patient becomes confused. Written or printed instructions are preferable. It is true that the printed rules involve expense, but the saving of the physician's time more than makes up the initial expenditure.

CHICAGO COMMUNITY TRUST SURVEY

The Chicago Community Trust in 1922 published the results of its survey of conditions in Chicago. I quote from the report as follows:

"In view of Chicago's losses of mothers and infants by death and disease, from causes connected with childbirth, and in view of the saving results of prenatal care, it is recommended:

I. That prenatal care be extended to all prospective mothers whom at present it does not reach by:

1. Education of the public to the perils of childbirth, and their easy avoidance through proper foresight and care, such methods as proved effective in the campaign against tuberculosis being used; magazines, the press, pulpit, paid public lectures, propaganda by health officials, personal contacts of home visitors, etc.

2. A direct educational campaign among the physicians, through

a series of papers on prenatal care and obstetric subjects, in medical circles.

3. Persuasion of the hospitals to insist upon adequate prenatal care of all patients enrolled on their books for future confinement.

4. The endowment of chairs of obstetrics and of free maternity beds.

5. Establishment of many more prenatal centers, through existing as well as new channels, paying particular regard to such neglected groups as colored patients.

6. The adequate material equipment of all such centers.

7. Maintenance of staffs, nursing, social service, and clerical, sufficient in size to administer them.

II. That the prenatal care afforded by Chicago agencies and institutions be coordinated and standardized through a permanent prenatal or maternity council, to consist of obstetricians, pediatricians, social service workers, nurses, and other public-spirited citizens.

Standards.—A minimum standard for prenatal work has been drafted by a local committee representing physicians and nurses, and is here presented for discussion and possible adoption by all persons or groups concerned in this field:

1. As soon as pregnancy is suspected, every woman should place herself under competent care.

2. Monthly visits should be made at the clinic up to the seventh month, then every two weeks.

3. Bimonthly visits should be made by the trained nurse or social worker, at which time the social conditions and hygiene of the patient are studied.

4. At the clinics the examinations should comprise:

(a) General Physical.

(b) Local.

(c) History of Previous Diseases, Operations, etc.

(d) History of Previous Labors, etc.

(e) Blood pressure.

(f) Urinalysis for sugar and albumin, complete if suspicious.

(g) Pelvic measurements, as complete as possible.

(h) Wassermann, if possible.

5. After the delivery, the mother and child should report for postnatal supervision.

It is to be hoped that all private physicians will recognize the benefits resulting from this careful work, and will, in time, adopt similar standards. They may be regarded as a guide to the time when, in the words of Sir George Newman of the British Ministry of Health, civilization shall mean "that no childbearing woman is without adequate and skilled assistance, and no infant without a birthright to health."

I am heartily in accord with these recommendations.

The ideal prenatal care system, either free or private, includes the following points, which for lack of space are only briefly discussed.

Good Service. Every effort should be made to systematize the work so as to avoid wasting the time of the patient, nurse or physician. Too often there is a lack of consideration of the patient's time. Courteous and dignified, not haughty, demeanor in conducting all examinations is essential.

Social Service. This is very important in the free clinic. In a restricted sense, social service methods should be used in private cases. If this were done in private practice, the busy physician would save himself by eliminating many undesirable patients and much unnecessary work.

Examinations. At the patient's first visit, a thorough history should be taken, a complete physical examination made, and her confidence and cooperation gained. Each of these are of equal importance and each is essential to the proper conduct of the case. Even the ignorant patient appreciates and knows good work. The day of just "engaging the doctor" is rapidly passing. Physical examination includes observations made on the head, neck, lungs, heart, abdomen and extremities. It is quite surprising how many defects are noted if looked for. The number of heart lesions is remarkable. Thyroid affections, tumors of the genito-urinary organs and lung pathology are not far behind in frequency.

Laboratory work is equally essential. Blood Wassermanns are important, as last year at Northwestern University Medical School Prenatal Clinic we found 10 per cent positive Wassermanns. In private practice it runs much less—2 to 4 per cent. All of these patients, with few exceptions, were put under appropriate treatment. Urinary examinations and blood pressure readings made at frequent intervals are essential.

While many of the principles of the Sheppard-Towner bill are wrong, it cannot be said that the bill is without merit. During its discussion, it was brought to the attention of thousands of women through

their clubs. This, in a way, was an educational campaign. If some such method could be employed by the medical profession to preach the importance of prenatal care, we would have fewer infant deaths and a lower fetal and maternal death rate. Both nurses and physicians have a tremendous influence with the laity. It is to be hoped they may use it to further prenatal work.

DISCUSSION

Dr. George Kamperman, Detroit: I wish to express my appreciation of Dr. Cornell's paper. Naturally, it is the last word on the subject. We expected that, and were not disappointed. The subject is so well covered that it would be almost impossible to add anything.

The question of reducing infant mortality is not a new one; as a matter of fact, it has been a problem to the medical profession for a long time. Some of the attempts promise to produce great results. Other phases are not so promising. For instance, there are some causes of fetal death over which we have very little control, some of these causes dating back, probably, a couple of generations. In order to save some babies, we should have begun two or three generations ago, by trying to put the ancestors in better physical condition. All we can do at present is to improve the present generation with the idea that probably succeeding generations may be better, and eliminate some of the physical defects Dr. Cornell has noted. The earliest fetal deaths are intra-uterine. Naturally we can only look to the mother and father for the cause of such a death, or probably to grandparents. Most common among those conditions, as Dr. Cornell has said, are venereal diseases, principally syphilis, and renal and circulatory diseases.

We know some of these conditions sometimes extend through a generation or two. This is particularly true of syphilis. However, a great deal can be done with mothers living to-day. All mothers with venereal diseases, or kidney trouble or circulatory diseases, need not necessarily have stillborn babies. By making early diagnoses we can sometimes reduce the mortality. This is true of syphilis through obtaining an early Wassermann. This should become routine in all our cases, the same as medical examination of the heart, urine, or blood pressure, have become routine. With some people it might give offense. If we make this a routine procedure, we can overcome this objection. In these cases, fetal deaths can be prevented by prompt and active treatment. Likewise, in kidney diseases. We know kidney diseases are very commonly due to infections. A thorough obstetric examination should include a search for infections—tonsils, teeth, etc.—for by eliminating such infections nephritis can often be relieved, even during pregnancy, and fetal death might, in that way, be prevented.

It is true that the public in general are indifferent to prenatal care. I do not believe this is entirely a matter of ignorance. I think it is a matter of indifference. Often mothers who have their first pregnancy obtain prenatal care, visit a physician regularly and follow all his advice very carefully, but when they have their second baby they do not present themselves until well along in pregnancy, probably taking the standpoint that since the first pregnancy was so normal and everything went well, there will be no danger with the next. Such a patient knows from her first

experience that prenatal care is important, but she has become indifferent to it, and does not seem to realize that the second pregnancy has all the dangers of the first. So we must constantly be preaching it to the public. Physicians can do this. This is particularly a field for nurses and public health workers.

Dr. Cornell also spoke of failure on the part of the attendant to recognize certain abnormalities as being a cause of death. This is where the medical profession is to blame. The medical profession needs spurring on as well as the public. Not only that, they need also better education.

Until a very short time ago it was exceedingly difficult for the young medical man to obtain the proper preparation for special work. Even today the opportunities are not any too numerous. We are repeatedly approached by recent graduates wondering where they can go to get this or that sort of training. And it is a problem. We do not yet have enough places where these men can train. Our hospitals can take care of a certain number, and the rest of them have to go without. The desire is there, and a great many men have this ambition to train, but the opportunity is not always available.

I wish again to express to Dr. Cornell my appreciation of his paper.

Dr. Charles J. Hastings, Medical Officer of Health, Toronto, Canada: This is the first opportunity I have had to take part in any of the discussions. I should like, before referring to the phase of the subject under consideration this morning, to express my appreciation of the able manner in which the various subjects have been dealt with.

However, we must bear in mind that in discussing the welfare of the infant and the best ways and means of further reducing our infant mortality, we cannot do so efficiently unless we include the mother, inasmuch as the weak point in connection with all our endeavors to control our infant mortality has apparently been the lack of efficient prenatal care of the infant, which is obviously dependent on the intelligent care of the expectant mother.

In our prenatal work we are not only conserving the best interests of the infant, but we are also safeguarding the mother. We must keep in mind the fact that the infant is nine months old when it is born and that during that nine months, the only source of nutrition the infant had was the mother's blood.

Obviously then, the results that we may hope to obtain as a consequence of more efficient prenatal care, depend for the most part on our seeing to it that the mother is properly fed, properly clothed, and properly housed, with sufficient physical exercise; that she has at all times a balanced diet—that is, a proper supply of vitamins, inasmuch as we know that the supplying of these vitamins to these developing infants depends entirely on the supply contained in the mother's food, and that the supply of vitamins in the mother's milk, after the birth of the child, depends on the supply of vitamins in the mother's food.

We are in the habit of saying that every child has a right to be well born. What are we doing to secure this for each and every child—to make sure that an infant is developing from a germ plasm that does not contain those hereditary factors that will militate against that child later in life? Is it not time that this organization was taking some action towards securing legislation that will require a health certificate before a marriage license is granted? Surely the human race

is entitled to as much consideration as are the lower animals. The absurdity of our disregard for this is very well set forth in the following fable:

A man who was not a very good specimen, walking through the country, had his attention drawn to a magnificent specimen of a Durham Bull, grazing in the field. He went over to the fence and as he watched that animal munching the juicy clover, he said to himself, "What a magnificent animal! It would be difficult to imagine anything more perfect of his kind." To his surprise the bull turned his head towards him and said, "Yes, you poor miserable little degenerate shrimp. If one tenth of the trouble had been taken to select your parents that was taken to select mine, you would have been a good animal too."

Time will not permit going into further details, but we have to start at the beginning, in other words, we have to begin our activities where eugenics leaves off—that is, with prenatal care; care of the newborn infant; care of the child in the pre-school age; complete physical examination of the child when entering school and again before leaving school; the safeguarding of our boys and girls when they enter industries through a properly organized division of Industrial Hygiene; and thus safeguarding them from conception until they pass into the next cycle of existence.

I have been wonderfully impressed with the deliberations of this conference. They have been an inspiration. The papers presented have been among the best I have ever listened to. Unfortunately, as is the case in all conferences of this kind, there has not been sufficient time devoted to discussions.

Dr. Walter H. Brown, Director, Child Health Demonstration, Mansfield, Ohio: While the discussion has been going on, my mind has not been dwelling on cities like Detroit or Chicago, but on the large number of communities under five thousand—those great stretches of rural territory. I do not think there has been any remark at all by any of us interested in the reduction of infant mortality about the desirability of having wise obstetric and pediatric practice brought to serve every farm in the country. It would be wonderful, of course, if that could be, but as a matter of practicability, we know that for many years to come great stretches of our rural territory must have some other solution. That solution will have to be an attempt to work out a way whereby knowledge of obstetrics can be brought to bear in our small population units. So, while I am anxious to see more men specialize in obstetrics, I am anxious to take away that part of the practice from midwives. But until such time as we can get a responsible substitute, we shall have to deal with the situation as it is.

The thing has another side, which Dr. Cornell mentioned when he said we ought to promote a desire for more prenatal work. Those of us who are traveling about the country find that this work is being done in a very limited fashion, and that there is some demand for it everywhere. That there has not been the proper contact between medical groups and some of the other groups is evident and needs no discussion. First, we should create desire, and it is being created. On the other side, the medical group should be prepared and willing to furnish adequate service. Preparing the medical group means preparing the doctor in the field. Our medical societies should provide more real postgraduate work for the man who is on the job. It seems to me if we had that sort of thing with proper articulation between various societies who are doing this educational work, we should build

up the kind of service we desire, and be enabled to bring to the mothers of our country the best that can be done for them in the bearing of their children.

Dr. Cornell: I think health certificates before marriage would be a good thing. It would arouse the public, to the importance of both parents being healthy before they are married.

I wish to subscribe to the fact that babies will do well on a four hour feeding schedule. We have been using this schedule in the Chicago Lying-In Hospital for the past four years. By changing from three to four hours, we saved one nurse's services. We found to our surprise that the babies did better than on the three hour schedule. We have very little complaint to make of babies regaining their birth weight. Most of the mothers keep on the four hour schedule when they go home. A baby under six pounds is not put on the four hour schedule.

One of the speakers spoke about the opportunity for postgraduate work. Again it is the fault of the public, perhaps. We have not the maternity hospital. We haven't them because of the lack of money to build them. The public has not been sufficiently interested to put them up. Have you a special maternity hospital in Detroit?—in Kansas City?—in Omaha? Where are they? In four towns in the United States. We have, strictly speaking, five maternity hospitals in four cities—two in New York, one in Boston, one in Cincinnati, and one in Chicago. Think of it, three million people and one hundred and forty beds in the maternity hospital in Chicago. It costs about one and a half million dollars to build a good sized maternity hospital.

Dr. Brown spoke about the obstetrics in the rural districts. We need good obstetrics just as much there as we need it in a city like this. We are going to get it some day through several agencies. First, it is coming through the medical profession. Our young graduates going out in the medical world today are better trained in obstetrics. That I know from experience. They are better trained in almost every line than they were ten, fifteen, or twenty years ago. When they go out into the communities, they are frequently told they cannot do this or that or follow out some regular method of treatment, and the first thing you know these men become more or less discouraged because the people will not let them do things properly. Education of the public will remedy this.

The agencies doing infant welfare work are shaping public opinion but it is an uphill fight. We should have the cooperation of every agency. It seems to me we ought to have a controlling advisory board similar to those seen in large corporations like the General Motors or the United States Steel Corporation. All policies are definitely laid down for each particular phase of each group. The factory does its work under the guidance of this one policy. The sales force has definite instructions how to create public demand, etc. The trouble at the present time with many of our societies is that one goes in this direction, the other in that, and the first thing we know they work at cross purposes. What we need is a strong advisory board to guide us.

CAN THE PUBLIC HEALTH NURSE DO MORE TO HELP REDUCE THE DEATH RATE OF MOTHERS AND INFANTS?

**MARY LAIRD, B. N., Director, Public Health Nursing Association,
Rochester, N. Y.**

On this first birthday of the American Child Health Association it seems appropriate to offer our congratulations to those organizations which were fine enough to lose their identity for the general benefit of all phases of American child life. It is well born because its parents have given it a heritage of cooperation, and thereby set every community an example of harmonious adjustment—by far the most valuable inheritance they could have imparted.

Today we are having to face frankly the tragic fact that, in spite of national legislation and other organized efforts to reduce it, the present high maternal death rates are increasing.

Can it be possible that all the knowledge we have accumulated for the past eleven years—all the programs we have outlined—are just theories—lifeless, and incapable of producing the hoped for results? It would look as if our next step would be to bring our practice up to our theory, to establish the principles we already have in the minds and hearts of our American parents. And who, pray tell, can do this very difficult and definite piece of education?

When you consider the close contact of the Public Health Nurse with family life in the homes, you can see that she has an almost unlimited opportunity if she has the ability and training needed.

I have heard that criticism, like charity, should begin at home, so with your permission, I would like to present a study of an 18 months' maternity program in one district in Rochester, N. Y., upon which we have based certain conclusions.

The city, with its population of over 300,000, is advertised as a city of homes, and it claims that 42 per cent of dwellings are owned by those who live in them. There are over 1,700 manufacturing establishments, the most outstanding of which are photographic supplies, women's shoes, and men's clothing—the latter is a source of much home work for women and children, and the other two furnish employment to many women in their factories and offices.

The visiting nursing situation in Rochester is quite different from that in most other cities of its size. It never had a visiting nursing service of any kind until in 1919, when the Social Workers' Club, horrified by the lack of adequate nursing service during the influenza epidemic, financed the coming of Miss Crandall to suggest some plan which could be made to work for the benefit of the people who were not able to secure skilled nursing care. The result was that, in September of that same year, the outdoor educational nursing services of two dispensaries, the Tuberculosis Association and the Northfield nurse (8 nurses), were combined under a Board of Directors composed of representatives from each organization, with organizing and overhead expenses paid by the local Red Cross for nine months, and then to be financed by the Community Chest. By common consent, it was agreed that a plan of generalized nursing should be adopted and that each nurse should be given instruction in general public health nursing.

In January, 1922, after two and one-half years' study of the nursing needs of the city, we were convinced that the most neglected phase of nursing work in Rochester was skilled nursing care for its mothers. So with the additional funds given us by the Female Charitable Society, an organization celebrating that year its centenary, with a record of splendid accomplishments to its credit, we started intensive maternity work in one district in conjunction with the general service. Our plan was to increase the number of nurses and have a continuous service—prenatal, delivery, and postnatal—all done by the same nurse in her subdivision of the district. We did have one nurse for night deliveries, who worked in the district mornings if she had not been called out the night before.

The particular district selected was one with a population of 84,435, covering the largest area of any of our districts, and it had neither hospital nor dispensary. There were but two school nurses for twelve public schools with approximately 9,050 children in attendance, and nine parochial schools with no school nurse. One section has a growing Italian population with the usual attending problem of overcrowding of homes and schools. There is another large section—rural—with no water supply except wells and without sewage, garbage or rubbish disposal.

We were first attracted to this district for our demonstration because of the increasing numbers of our mothers who were gainfully employed either in the home or in factories; by the fact that of all the babies admitted to the Infants' Summer Hospital those from this dis-

trict showed greater neglect than the babies from any of our other districts; because within our own families there was a steady increase in delinquency among the children; and several unlicensed midwives and unlicensed baby farms were prospering undisturbed.

We could not persuade the patients who lived as far as seven miles away to go to the one General Hospital Clinic, outside the district, which was so overcrowded as sometimes to make them wait three or four hours for their turn. Then, too, its policy was to give care only to the mothers who expected to be confined in the hospital, so we engaged an obstetrician to come to the District Office for one prenatal clinic a week.

From Health Bureau statistics we found that the whole city averaged 568 births a month—twenty stillbirths and nine deaths of babies under one day. In going over the facilities for hospital care for our mothers, we found that Rochester had only 124 maternity beds in the whole city, and only 65 of these were available as ward beds for our families. It did look as if quite a bit of skilled work was needed in the homes.

ACCOMPLISHMENTS IN ROCHESTER

After equipping our clinic, we started a loan bureau from which sterile and other supplies might be secured at cost or free to those who were being supported by social agencies and requested them.

The next step was to visit every general practitioner in that district to give him an idea of our aims and ask his cooperation in getting in touch with as many of his patients as he desired. With the exception of one physician, they apparently heartily endorsed the work. We also sent letters to all the physicians for whom we were doing postnatal work, outlining our plan and asking them to allow us to give their patients prenatal instruction and care. We asked their permission to have ready sterile accessories at cost for their confinement, and to keep them in touch with the condition of their patients by sending them duplicates of the clinic and home visits. We also offered them the services of the nurse for preparation and at the time of delivery, and for daily postnatal care and instruction. Our physician was to deliver only those whom they could not afford to deliver, who had no doctor engaged, were not eligible to the City Doctor's care, or had previously employed unlicensed midwives.

Strange to say, out of 57 physicians, only three have referred prenatal cases to us. However, they have referred many postnatal cases.

During the past eighteen months there have gone through our clinic only 72 patients. Forty of these were foreign-born mothers. In studying the sources, we think it is significant that 23 of them were found earlier in their pregnancy than the seventh month by the nurses in their general work, and that 24 came into the clinic themselves, or were referred by former patients. Usually these patients who referred themselves were in their twenties and were by far the most faithful in attending the clinic and following instructions. We also found that young mothers were more easily persuaded to be confined in the hospitals.

Of this group, one stands out as being particularly satisfactory. It was a 34 year old mother with five living children, none dead, who had in the past seven years had eleven abortions. She came to us in her ninth month. Three clinic visits were made and 17 visits to her home. The home visits were as much for encouragement as for instructions because she was so depressed. It seems she had always had a midwife before, and her husband, an alcoholic, did not approve of a physician. He had insisted upon her being up on the third day after delivery. She had a long hard labor, the nurse was with her for 12 hours and our physician delivered her. It was a normal case, and she remained in bed for 10 days afterwards, made a good recovery, and is still nursing her baby. She was more than grateful for the skilled care, and the increased respect of this family for maternity care has seeped through to some of their neighbors.

Of these 72 patients, seven moved before confinement; 12 are waiting patients; 18 were delivered in the General Hospital; 21 were delivered by our physician with the nurse present in all except two cases, where the delivery was spontaneous; 13 were delivered by private physicians to whom we sent the patients. The nurse was present in all but six cases, when the physician did not call her. One mother aborted at five months. All these mothers are living. All but three babies are living. Two were of syphilitic mothers under treatment, and died, one at the age of two months and one at one month; the other baby died of pneumonia when two months old.

The conclusions we have drawn in comparing the group of patients who have had the continuous service with those in the district who have had the postnatal service only, lead us to believe that every mother should have more adequate prenatal and delivery nursing care, if we are to reduce the infant mortality rate throughout the city. Our mothers

who had prenatal and delivery care were less exhausted after delivery and made a more rapid convalescence than those who did not have it. The mothers who were not prepared for delivery ran temperatures, had stitches to be cared for, were troubled with gas, and were far more uncomfortable than those who had been prepared for delivery. Their babies also distressed them by being very cross and hard to care for. It would seem as if our whole piece of maternity work shows lack of preparation for it. That we had not made the physician recognize the value of our prenatal service to him is shown by the fact that he did not call us; we have lacked persistence in getting over to the family, the physician, and the social agency the needs of the expectant mother.

EDUCATION IN THE VALUE OF PRENATAL CARE

May not this be overcome by more adequate training of the physician and the nurse in the medical and training schools? Of course, you will all groan at the idea of putting another thing in the already overcrowded curriculum of these busy schools. I have heard your argument that you consider that if you have given the fundamentals in professional skill, you cannot be expected to give anything more, but if you have not prepared the students for this very important field of work, have you given them the fundamentals in their training? Is it not probable that, when a physician is called into a maternity case in an emergency (and the excuse the physician gives us when calling in a postnatal case is that it was an emergency to him) he could make a greater impression on the family by emphasizing the benefit to them of prenatal care just as the nurse is expected, while doing postnatal work, to get this education over to the family so that they may never again make maternity an emergency?

It seems impossible to expect to do constructive work along these lines if we do not have the continuous service, in spite of its costliness. Is it any more expensive to pay for good preventive work than to pay large amounts for treating and results in supporting orphanages, dispensaries and hospitals?

Included in adequate prenatal work, of course, should be that of the nutrition worker. Dr. McCollum has proved conclusively in his experiments with animals that any effort in proper nourishing of the mother has its beneficial results in the production of live offspring.

With the help of the dietitian we are trying to educate the mothers

to live on their income without doing either home or factory work for at least four months before confinement. We find in many cases that they can do this, and that the reason for working is often the fact that the husbands depend on them in helping to pay for the home or in sending money back to relatives in their home countries.

In our continuous service where we have been able to make the mother understand that a satisfactory convalescence is due to adequate preparation for it, she is more cooperative. We found that it was absolutely necessary to insist upon attendance at clinic and at least an effort to follow instructions in order to have the services of the nurse at delivery and postnatal care. This may be the reason for the slow growth of the clinic, but it has been worth while, for some of these mothers are now returning to us in the first and second month of their second pregnancy for care and instruction.

We are amazed at the number of mothers who beseech the nurse to tell them how to produce a safe abortion; also at the fear so many of them express of their husbands, who dominate the home. It makes us believe that fathers have been neglected in education for parenthood, and that the public health nurse has a definite piece of work to do here.

As to postnatal work, we have found we could accomplish far more for the patients when our contacts with the family were made during prenatal days with the mother. We find that even though they did not appreciate the prenatal care, they have increased respect for the nurse's instruction during the postnatal days because of the service she gives at the delivery and during the convalescence. The mother is more easily persuaded to remain in bed for the required period when she understands the reason for it. It is easy enough to tell a mother she should stay in bed, but when other children in the home need her care and no provision is made for them, it is difficult for her to accomplish this. The nurse whose first visit is made to give postnatal care does not have the family background clearly enough in mind to know how to cope with this situation, and it is here that the nurse who is not familiar with the functions of the agencies of the city is handicapped.

In conclusion I want to say that our plan for our own work is:

1. To prepare better women for more thorough and detailed work.
2. To try more conscientiously to work with the physicians, the health and the social agencies.
3. To try to increase within all our districts the continuous prenatal, delivery and postnatal services. Only then shall we be four-square with our mothers and babies.

THE REDUCTION OF INFANT MORTALITY IN A RURAL STATE

FRANCES SAGE BRADLEY, M.D., Director, Bureau of Child Hygiene,
Little Rock, Ark.

Our chairman asked me to prepare a paper on the reduction of early infant mortality. I may as well admit that I am taking an unfair advantage of her very kind invitation. It is too good an opportunity to lose. My justification lies in two facts: first, official agencies, to date, have spent their time studying the city child who is decidedly in the minority; second, our chairman has undoubtedly chosen men and women far more competent than I, to discuss the city side of this question, while I know only its rural aspect. I am therefore asking your consideration of a program for the reduction of infant mortality in a rural state.

It was logical and practical that infant mortality should have been studied at first hand in cities; that federal, state and such great organizations as this should assemble the best talent of the country to meet this national problem. The results of these studies have proved that if we cannot be allowed to join a league of nations, we may at least strengthen and develop our own, and that the place to begin is at the beginning—maternity and infancy.

I want to remind you, however, that the American baby is a country baby, and that a program adapted to the needs of the city child is as inadequate to meet the needs of the country child as a lecture or an exhibit pitched to the plane of a city audience, is inappropriate and ill-advised for a group of rural men and women.

It is not necessary to discuss with this body the existence in the United States of an unduly high infant mortality, meaning, of course, the deaths occurring in the first year of life; or to stress the fact that, tradition to the contrary notwithstanding, the period of highest mortality is during the first few days or weeks of life. Neither is it worth your while or mine to dwell on the fact that in rural sections, where most of our babies are born, no one knows when, where or under what conditions they make their entrance into or their exit from this world of ours.

I feel sure that we are all willing to accept the figures of the United States Bureau of the Census, of the Children's Bureau, of this organization and of great insurance companies making formidable studies of vital statistics. According to these agencies, the United States is still near the bottom of the ladder in the protection given our childbearing women; and at least New Zealand, Australia, Norway and Sweden are ahead of us in the provision made for safeguarding our babies' lives.

Dr. Woodbury, in the *American Journal of Public Health*, May, 1923, states that the infant death rate of the registration area fell from 99.9 ('15) to 75.6 ('21). He adds that this reduction, while covering the first twelve months of life, did not apply to the first few weeks of life; and that the reduction did not include stillbirths, deaths due to malformations, nor injuries at birth. These actually increased during this seven year period, as did also deaths due to diseases of the gastric and intestinal tract and to those of the respiratory system.

Dr. Woodbury says further that the reduction of the death rate from diseases peculiar to early infancy, was not only absolutely, but relatively, greater in cities of 10,000 and over, than in towns of less than 10,000 population. Also, in 1915, the infant death rate of cities was nine points higher than that of rural communities, while in 1921, it was one point lower than the death rate in rural sections.

In other words, as long as the city is considered the habitat of the typical American child, and the frills and refinements of our programs made to meet these conditions, so long will we get definite results in these high spots. However, when we finally recognize the fact that the American child is a country child, and that he comes into the world far from medical and nursing service; when we reach out over the plains, down through the valleys and swamps, climb high beyond the hills into the fastnesses of remote mountains, we shall find the backbone of this country and really reach the crux of the question, the heart, the brain, the brawn of the American nation.

Naturally any program for the reduction of infant mortality must be studied in relation to the people we wish to reach, their social, economic, educational and religious status; the facilities at their disposal, and what official agency may come to their relief.

First, like the small boy, go out with a generous supply of salt and find your bird. You will wonder where the rural baby lives. His mother you will find reticent, inarticulate, and only a diplomat may draw from her the admission that she craves confidential advice and the legitimate service of an official agency.

Just how helpful do you think she finds our smug letters and beautiful booklets urging her to go to a maternity center as soon as she knows that a baby is coming? Or our advice to call upon a public health nurse, or upon her family physician? Is it encouraging, or is it good psychology to assure her that her own welfare and that of her baby demand such service when there is no maternity center, no public health nurse and when she knows a doctor will laugh at her for requesting thorough examination, instruction and supervision during pregnancy?

THE RURAL MOTHER

While she adores her babies and considers childbearing a logical and desirable goal of marriage, is it likely that she deliberately brings on abortions, miscarriages or complications of confinement? Is it probable that she chooses for attendant an ignorant negro granny who semi-asphyxiates her with smoking cotton to dull her pains; or who doses her baby with extract of bootleg booze and lice from the head of the paternal grandmother? Does she intentionally risk her life and that of her baby with a tradition-ridden white midwife who swathes her with steaming tansy to control convulsions; who hides, under the lying-in bed, an axe, a knife or a pair of scissors to cut short her pains; or who cups her baby up and down the spine with a tiny gourd to ward off "bold hives?"

Does she love her children less than the city woman and fail to grieve when, by the "hand of Providence," she loses five out of eight or six out of fourteen of the babies she has borne? Like the man who recalls his early record only as a conquering hero, she tells you only of the children she has reared. Others died so young that she did not quite want to leave them in the nearest burying ground, ten, twelve, fifteen miles away.

Perhaps there was no undertaker or she could not afford a coffin. Instead, she lines a little homemade box with a bit of wedding finery and lays the baby out in the garden nearby. A death certificate may or may not be filed in the archives of the State Board of Health. It may state "Cause of death unknown. No doctor in attendance."

The rural woman is deeply religious. She believes the Lord will provide, and that breast milk is one of his dispensations. In many sections of the country the nursing bottle is unknown. The rural woman is not subjected to the mental and nervous strain of the city woman and

consequently nurses her baby indefinitely or until he weans himself. Is it her fault, or yours and mine, that he is found nursing at two, three and four years of age; and that his father teaches him to smoke before he is weaned? Is it her fault, or yours and mine, that one mother reported nursing her baby 86 months and added that he would stop on the back porch and dispose of his chew of tobacco before coming in from school to nurse? Yet this was a conscientious mother who brought her child a long way through the country to know why he was such a stunted little runt.

While breast feeding is the rule, the country baby also partakes, at a tender age, of a lavish and promiscuous diet. It is common for the baby of one to three months to be given a taste of everything the mother eats, "to protect him from colic." In her solicitude she often chews for him such food as he is unable to mouth, but never doubt her honesty and sincerity or her devotion to her baby. She is living up to her teaching, even as you and I, and it is not her fault if her teaching is pitched on a different plane. What provision are we making to change this plane? She is the great American mother and her babies will be as long lived and as sturdy as you and I plan for them to be.

Whose is the responsibility? Is the baby the charge of an indulgent, untrained, helpless family? Is he the charge or the victim of a cumbersome, rusty, municipal machine, short sighted, without precedent or ideal? Is this the way the case of the city child was solved and the early infant mortality of urban sections brought under control?

Is it not rather the right, the privilege of such an organization as this, of the U. S. Children's Bureau, and of all agencies committed to the welfare of babies, to apply the knowledge and experience obtained by years of study of the city problem, to that of the country? Have you not by your past achievements, given us the right to expect constructive help in the organization of state, county and community programs? Such help would be especially timely since the enactment of the Sheppard-Towner Law. Have you done for the rural baby as much as for the baby within your gates?

I might add that in our own rural state, the efforts of the Bureau of Child Hygiene, the official agency for the reduction of infant mortality, are directed along the lines of organization, education, demonstration.

1. *Organization*

By organization of existing agencies we hope to coordinate and unify the efforts of every group interested in this important part of our

program. We find that practically every organization in the state is interested and ready to do its part. This includes the State University and Department of Public Instruction; the State Department of Agriculture, with home demonstration agents in almost every county; the American Red Cross and the State Anti-Tuberculosis Association; men's groups, as Chambers of Commerce, Boards of Trade, Rotarians, Civitans, "ad" men and others; women's groups of church and charitable organizations, League of Women Voters, Parent-Teacher Associations, the State Federation of Women's Clubs, W. C. T. U., and the like. Negroes also are eager and responsive.

2. *Education*

Along the lines of education lies our long suit, for it involves our entire public. The excellent programs with their highly specialized activities reported by many of your official agencies are dreams to a primitive state like Arkansas and other Southern states. We hope to catch up with you some day, and hereby warn you that we are on the way. But it is hard sledding at the start. We must begin with our doctors, and if any of you have undertaken this ticklish job, you may know something of what we are up against. The rural doctor of romance is a bulwark of strength and dependence, fighting night and day to save the life, health and happiness of his—I had almost said parishioners, for he is the depository of all their troubles from scabies to salvation; while the rural doctor, as we find him, refuses to go four miles to a woman in convulsions; leaves an ignorant mountain midwife to herself to manipulate and struggle with a club-footed baby and, especially if he is a negro doctor, refuses often to attend a woman in confinement unless paid in advance.

Perhaps he is a graduate physician, perhaps not; sometimes, according to one of our legislators, he is licensed by the general assembly to practice medicine, upon assurance of his ability to differentiate between dandruff and bunions. He tells us frankly that our educational work is all "bunk," tending only to undermine the confidence of the public in the medicine man and giving rise to doubt and dissatisfaction in the community. Again, he protests that he sees no reason why doctors and nurses should busy themselves trying to take the bread out of the mouths of the profession. Happily this man is not the rule, but he is uncomfortably common, and is active in his section. We will gratefully consider suggestions from this body for changing his viewpoint.

Our nurses are public-spirited, fine-visioned women, but few and

far between. We have 13 county health nurses in our 75 counties and the service, instead of growing, is steadily dwindling with the shrinkage of Red Cross drives. It is also necessary to keep an eagle eye on this ill-fated thirteen to offset outside temptations in the form of matrimony or of more lucrative jobs elsewhere.

We are inoculating every graduate nurse with the germ of public health and every public health nurse with the bug of maternal and infant welfare. We are trying to comfort ourselves for the loss of a five year demonstration by this association, with the scholarship assigned recently to our Director of Public Health Nursing; and we have hopes of favorable consideration by the American Red Cross of our application for a Jane A. Delano Nurse for an isolated mountain county. These details, trivial to states counting nurses by the score, are momentous to Arkansas.

We have 1,500 registered midwives and probably many times that number unregistered, who are ignorant, illiterate, and untrained. It is impossible to license these women. Instead, we shall attempt to register, organize and give a simple systematic course of instruction in the fundamentals of asepsis for mother and child, in the importance of calling medical aid in all but normal cases, and in the prompt registration of births. We are hoping eventually to issue a certificate to each midwife completing this course satisfactorily, which, when framed and hung upon the walls of her home, may bring prestige to its proud possessor and be the means of gradually eliminating her less ambitious colleagues. We shall supervise their work as closely as possible and encourage the determination of the old granny who protested recently, "Lawd, no, chile, I'se gwine ter git out o' dis yer business."

Our educational campaign depends largely upon the temper and spirit of the press. They have been uniformly generous with their space as long as supplied with what they call "local stuff." The infant mortality of Ouachita County means much to Ouachita citizens. Another sort of publicity is in the form of the home made poster, four sets of which are working overtime traveling from community to community and inspiring making of permanent local exhibits, and a series of simple booklets which we would exhibit with trepidation to this discriminating audience. We lay no claim to the quality of their content and we are painfully conscious of the fact that "fools rush in where angels fear to tread." It is probably poor business to add to the multiplicity of literature cluttering the field of child welfare endeavor today. We ask you to believe, however, that for ten years we have studied carefully

our rural audience. We have watched its reaction to the average exhibit, the average booklet and leaflet, the average advice given by the average city worker. We are trying to get the viewpoint of the man and woman whom we want to reach instead of thrusting upon them our city notions. More than once we have found ourselves gaining more than we could give.

The average rural couple enters into the marriage state more seriously than the average city couple. Their marriage certificate carries no divorce coupon, and birth control is to them an abomination. In our first booklet which is sent to the newly married couple no mention is made of childbearing, but both man and woman are urged to have a thorough examination and be sure that they are in sound physical condition. In the second booklet stress is laid upon the responsibility of citizenship and upon the establishment of a home, convenient, attractive, and a definite contribution to the community in which they live. This suggestion is to offset the problem of tenancy which is a real menace to our Southland. Given good inheritance by securing a sound mother and father, and good environment by obtaining a suitable home for a young baby, we have paved the way for the consideration of pregnancy in the third booklet, and so on through the care of confinement, care of the young baby and of the child up to school age.

I will admit that we have stressed certain points simply to meet the criticisms of this and of other classic organizations, just as in our record cards for prenatal, postnatal, and infant care, and the like, we have been constantly haunted by the smiles of derision we could see on the faces of you wise experts of whom we stand in such awe.

3. *Demonstrations*

The third of our efforts to reduce early infant mortality will be the demonstration in certain localities of the value of maternity and infancy centers. By such demonstrations we hope to educate our public to the fact that our early infant mortality is a very present and definite factor in hindering and retarding the progress of our state. This practical project will be initiated by the Bureau of Child Hygiene in counties sufficiently interested to continue the work after a reasonable demonstration.

Especially helpful as a demonstration has been a survey of a county by a county, the people themselves studying by house to house visits conditions affecting their own mothers and young children. Data thus collected are turned into the office of our Bureau, tabulated and arranged

in the form of a report, which is submitted to the county for further action. Much hitherto unknown and illuminating information is thus placed at the disposal of those most concerned, and apparently this furnishes food for reflection for community discussion and for definite action by those in authority. The only objection to this type of work is our inability to respond to the number of requests for such surveys.

I am sure this is not what our chairman wanted, yet I confessed frankly that I could not give her the clear-cut, specialized program of a city worker for reducing early infant mortality. In a rural state it is impossible to separate efforts for the control of infant mortality of the first few weeks from efforts for the control of infant mortality of a later period. First, we must convince our public of the existence of this early infant mortality and of its significance; second, we must devise a program for its prevention, a program which I trust will meet with very general discussion at the hands of this audience.

DISCUSSION

Miss Helen Chesley Peck, Secretary, Infant Welfare Society of Minneapolis: Miss Laird has given us a complete outline of what a private organization may do. I merely want to emphasize one point—the part the public health nurse plays in this program. We have just been told that the child death rate is not decreasing and that prenatal care will help reduce mortality of both mother and baby. On every side we hear how much depends on the public health nurse and what a tremendous responsibility rests on her shoulders. Unfortunately, many nurses seem to think this is a part that the public health nurse alone can play. I feel it should be the duty of every nurse to give her cooperation to this program. There is no phase of nursing that does not touch prenatal care. Cannot each nurse doing any type of nursing share this responsibility with the public health nurse? I wonder why the nurses are not feeling this themselves. Perhaps it is because they do not have the fundamental education which Miss Laird said was so necessary. In Minneapolis 65 per cent of the babies born were delivered in hospitals. What an opportunity for the nurses to stress the importance of early prenatal care. I feel that the hospitals themselves and the training schools must make more effort to have all graduate nurses feel this responsibility. We have made a small attempt in Minneapolis to emphasize this. In the General Hospital four years ago we had a few expectant mothers in the obstetrical clinic coming there because they had a definite illness. Last year this hospital had an average daily attendance of 22 mothers in the prenatal clinic. This clinic was in charge of a public health nurse and with her was a senior pupil who came to these clinics for a definite period of instruction. We are thus making some attempt to give the student nurse an opportunity to observe the value of prenatal care. I wonder if it is possible to bring this subject once more to the attention of our national nursing bodies.

Miss Rand: Doctor Cornell has asked me to say that he has learned something he had not known before, and that is, another city has a maternity hospital. He did not know that New Jersey had one.

Dr. Helen MacMurchy, Canada: Like everyone else in the audience, I listened with interest and great profit to the three papers presented this morning. One feels what a great help the work Dr. Bradley and Miss Laird are doing is to the communities who are fortunate enough to have them as leaders. The Canadian problem is a community problem too. More than half of our people still live on farms, thank God. If Dr. Bradley has not read Kipling's "Letters of Travel," she, perhaps, might find in it one or two quotations for her next address, and I hope we may all be there to hear it. Kipling describes some conversations he had with American mothers, and what he said about them I will not tell you for no doubt you will enjoy reading it yourselves. Describing also, as only Kipling can, an evening in the country, and two rural gentlemen conversing on the way home, Kipling remarks, "These are the Americans," so you see he agrees with Dr. Bradley. Miss Rand made a graceful reference to the constant progress of this splendid organization. That was a wonderful event, the formation of this society in 1909, in New Haven, and great things have happened since then. Infant mortality has been reduced in more than one country, to 75 or less. We are only now beginning to discover, however, that the reduction to 75, which is a great matter for thankfulness, has covered up and concealed the fact that in the first month of the first year there has been no reduction. That is true all over the world. Dr. F. Truby-King, Director of Child Welfare in New Zealand, points out that there has been no reduction in the first month of life on infant mortality in New Zealand in that time. What does it mean? It means what the Hon. John Burns said in the first English speaking conference on Child Welfare. John Burns said, "Concentrate on the mother." What he said then is true still. That is what that means. The mother has too much to do, and she has few to help her.

There are two things we owe the mother. The first is, to share with her every bit of knowledge we possess that is of any use to her. She is entitled to it. But we must speak her language. We must do as the prophet did when he went to visit the exiles, we must go and sit where she sits. There are then two things we must do. First of all, we must have the education and knowledge to give the mother, and then we must give it to her in a way she understands. Who is going to lead us in this crusade to do something for the mother? She must have proper care—medical, nursing and domestic. We look first of all to the medical profession, and the nurses, who are a part of the medical profession. I think that the medical profession will have to come up to better standards, especially in regard to medical education and providing for rural service. Then for leadership. We must look to the mother herself for leadership and we need the father. It is because we have not had "Daddy" on the job that we have not got along better. Finally, we need the good will of the community. Once get into the heads of business and professional men and Everyman and Everywoman how great the importance of Child Welfare is, and how much it means to the Nation, and we shall get results.

**JOINT SESSION WITH THE CENTRAL STATES PEDIATRIC
SOCIETY AND THE WAYNE COUNTY MEDICAL SOCIETY**

THOMAS B. COOLEY, M.D., Detroit, Mich., Presiding

doubly important that the mother and teacher should consciously provide the right kind of stimulus. They, themselves, are an important part of the child's environment. Children quickly reflect the interests and attitudes of the people about them. A teacher naturally emphasizes what she is most interested in. This is particularly true in the kindergarten, which employs no text books and which has a flexible curriculum. A flexible curriculum is an advantage, but it may also be a disadvantage. In teaching, and in teaching young children particularly, we should remember that the art of teaching is—the art of emphasis. Sometimes through a negative kind of emphasis, we make very undesirable habits interesting. For example: Bobby had been brought up in the right way. He liked milk and he drank it as a matter of course. One morning he astonished his mother by begging her to put in his milk just a few drops of coffee. His mother said, "Bobby, what is the matter with you. You have never wanted coffee before!" "Well, Mother," said Bobby, "I want to see the face my teacher makes up tomorrow morning when I tell her I've drunk coffee!"

When children live day by day in the right kind of a home or school they often make certain generalizations themselves, which give a splendid basis for learning facts about health. In one kindergarten there was an extra supply of milk for luncheon, because it was a rainy day. Mary said to the teacher, "We've got some milk left over." As the teacher was talking to a visitor, she said in an offhand way, "You can give it to the ones who need it, Mary." After a little while Mary came back and said, "I did it. I 'giv' it to all the skinny ones."

Some little girls were making furniture for a doll house. The doll house was very small and the dolls were many. One child said, "We have got to put two dolls into one bed." But Lena demurred. "No, we won't. We will make two beds because if they sleep together they'll snore the breath in each other's faces!"

In another school, the children had been on an excursion to the bakery shop. When they came back to the kindergarten and were reproducing the store, they conscientiously wrapped every little clay loaf of bread in waxed paper. They had discussed with the teacher why this was done in clean bakeries, and they saw no incongruity in following the same laws of hygiene even with play materials. In the same school the children were building a community with blocks. They had made houses, a school house, a fire engine house and a church. They had only a few blocks left and they decided to use these for a store. One child said, "This is going to be 'The Five and Ten.'" Another said, "No, it's going to be a candy store." But the question was decided by George, who said decisively, "No, it's not, it's going to be a grocery store. People can get along without candy, but they can't get along without groceries."

These stories illustrate how naturally children learn facts about health through the activities of the kindergarten. It is the beginning of the application of that sound principle of health education that health should be taught through all the subjects of the curriculum.

Mrs. Collier: On the table at the doorway, there is a small selection of health books. The classroom health book from the kindergarten through the eighth grade is a very helpful device for correlating health teaching with the regular school work. The books gathered together here show how we can correlate our health teaching with geography, science, reading, arithmetic or composition work, and with all the hand work of the little children. These books were gathered from schools in California in the course of my work throughout the state.

THE TREND OF PEDIATRICS

BORDEN VEEDER, M.D., Professor, Clinic of Pediatrics, Washington University,
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In a discussion of the future of pediatrics in the presidential address read before the May meeting of the American Pediatric Society at French Lick, Dr. Holt came to the conclusion that three types of men would be needed: first, a research man—likely to be a full time head of a department in a university medical school; second, the man who applies our best science in the treatment of disease in the home or hospital; third, the public health pediatricist to organize and direct this special department in the city, town or county. Dr. Holt considers that all these are equally essential, and that instruction by all groups is needed in our medical schools. In other words, Dr. Holt took the view that the specialty of pediatrics will in the future be made up of three different specialists. It is quite obvious to deduce that their common meeting ground is interest in the health of the child, and this therefore may serve as a definition of what we call "pediatrics."

It was more than chance that in a recent address, written before Dr. Holt's paper was read, I took practically the same theme, but from a somewhat different viewpoint; that is, that the essential basis of pediatrics is the study of the biological problems of the child. I use the expression "more than chance," as my own theme was instigated by numerous over-the-table discussions in the last year with a number of members of these societies, as we have considered the tremendous development of our subject in the past ten or fifteen years, and the changes in our mental attitude toward our problems as experience has given us wisdom and hindsight.

Whether one agrees or disagrees with Dr. Holt in regard to the future make-up of pediatrics, it is impossible to picture more clearly the three distinct trends that have been taking place in the development of our subject. No one can deny the importance of each of these, yet it seems rather difficult to reconcile such diverse interests as the first and the last as distinct unities in one and the same specialty. The problem of the future, as it seems to me, is how to correlate these three

developmental tendencies, which are so important to the health of the child, so that we can go ahead with a unity of purpose which is necessary if we are to obtain the best results.

SCIENTIFIC RESEARCH

Let us consider for a moment the scientific development and its future. According to the context of Dr. Holt's paper, he meant by the term "research worker" the laboratory scientist. I am sure no one will dispute the importance of basic scientific work in pathology, chemistry, and bacteriology as it applies to pediatrics. It is this factor which keeps the science of medicine a progressive, living thing. To this audience it is unnecessary to quote illustrations. The question that has been raised in my mind has been whether or not we have reached a point where it is possible for the pediatrician to attack basic fundamental problems. A little thought reduces fundamental laboratory problems as they relate to the child almost wholly to problems of infection and problems of nutrition. The first requires a profound knowledge of bacteriology and immunology; the second, a knowledge of biochemistry. The chances are that such an expert is far more interested, if not entirely so, in the problems of disease as related to his own field of science than in the problems of the child. As I tried to point out in a previous paper, the mere fact that a research worker is engaged in the study of diseases occurring in childhood does not necessarily make him a pediatrician. There are, however, thousands of minor problems, and these are the things that we chiefly discuss at our medical meetings, that can be studied by the pediatrician in conjunction with his clinical problems which lend real interest and zest to his work. Perhaps the absolute value of much of this original work may be questioned, but the motive behind is of the best and needs every encouragement. It is my own feeling that we have had a tendency to overestimate the value and overemphasize the importance of much of the so-called scientific laboratory work that has been done in the field of pediatrics. Pediatrics is not primarily a laboratory subject—it is much broader, and the results of laboratory work are important only in such degrees as they help us in solving the problems of the child. We sometimes fail to remember that original or research work of equal importance is being carried on in the field. Many of the problems of childhood do not lend themselves to laboratory research, using this term in a narrow or restricted sense. Much of the knowledge which has led to the reduction of infant mor-

tality, for example, has been the result of non-laboratory studies and measured by its reaction upon the practice of medicine and in its result in saving lives, it is difficult to match the importance of this by the results of laboratory work in the field of pediatrics. It is and will be given to few pediatricians to become scientists or laboratory or research workers in the true sense of the meaning of these terms. What is of importance is that every pediatrician should have the scientific attitude of mind in that he should look for the truth in his daily work and problems, and search for new knowledge whatever be its source.

CHILD HYGIENE

All things considered, the most rapid and important development in pediatrics has taken place in that part which we designate as child hygiene. Some fifteen years ago, the old Child Hygiene Association had not been organized; state, municipal, and county divisions of child hygiene were unknown; health education in the schools consisted of courses in elementary physiology. The pioneers in the development of this field were frequently the subject of ridicule and scoffing. Nevertheless, today it is the most important trend in our work and one of far reaching importance to the medical profession as a whole. As one of the pediatric group who has been interested in, and to a limited degree active in, child health work, I feel that I can with propriety discuss a question which has been in my mind, and that is, whether or not our enthusiasm has run ahead of our knowledge. It is as if we had been building a structure to which many architects have contributed, each building according to his or her own ideas of design without any one having paid particular attention to the plan as a whole or to the relation of one part to another, or, even more important, without calculating as to whether the foundations are capable of bearing the superstructure. This movement, which was primarily a medical one, has swept along in the attempt to educate mothers and the children themselves in the laws and methods of living which lead to health, and has been taken up by doctors, nurses, teachers, nutrition workers, public officials, sociologists, and the lay press. In many instances, the fundamental medical basis or direction has been brushed aside or passed over by the wave of enthusiasm with which the American people seize on any new fad which catches the public eye or ear. If I may be permitted to use a slang phrase, the child hygiene movement may not know where

it is going or how it is going to get there—but it's on its way. I do not mean to be pessimistic or sceptical of the future, or to question the value or purpose of the movement, but it does seem to me that so much of our labor has been wasted or misdirected, so much taken for granted, so much effort has been spent in the development of organizations which have little or no idea of methods to be used, or an exact idea of their object, that it is time to take stock of what we are really trying to accomplish and of the best methods to obtain the end result. I am not willing to concede that the methods employed so far, such as welfare clinics, state and municipal divisions of hygiene, health education, visiting nurses, nutrition workers, and the like, are in anything more than an experimental stage. I feel that our mental attitude toward them should be a scientific one—that is, we should try to get at the facts and the truth as to their value, and we should be willing to take up new methods or discard old ones, even though they be pet hobbies—for it is only in this way that we can in the end bring about results of permanent value. We have, as a result of experience, enlarged our vision from infant mortality to the health of the child from conception through adolescence; we have progressed from infant feeding to the importance of the mental hygiene of the child and the teaching of positive individual health. How can these various subjects and methods be best administered and developed? What are the best methods in terms of economic effort? What is their relative value in relation to the health of the child? These are the problems we must stop to consider lest by its own top-heaviness the whole building of child hygiene falls down. As far as the pediatricist is concerned, my own feelings are well expressed by Dr. Holt when he says, "He must be a teacher and leader of the public in these matters."

DISEASES OF CHILDHOOD

The growth of the Central States Pediatric Society in its nine years of existence is a striking illustration of the interest in the diseases of childhood which has developed in the medical profession. One may term this the trend of pediatrics as related to the general practice of medicine. Not only has the number of pediatricians increased, but the general average of the work with children has improved, and the general practitioner is showing an increased interest in the subject. This last is perhaps the most important factor, for despite the growth in the number of pediatricians, the vast mass of children come under the care

of the general practitioner and will, I am sure, continue to do so. Our young graduates are leaving the medical schools with a much better training and not with the feeling of some fifteen or twenty years ago, that pediatrics was a combination of crying babies and higher mathematics. Our graduate courses are more and more attracting the attention of the older practitioners, who are coming in for short courses which enable them to go back to their work with a new interest, and better prepared to cope with the problems of daily practice. The pediatrician is, in fact, so far as his medical work is concerned, a general practitioner limiting his work to an age group, and it is for this reason perhaps that the pediatrician is in closer rapport with the practitioner than any of the other specialists. Among the laity, in the cities at least, who are coming to look upon the general practitioner as belonging to the past generation and bemoaning the fact, the pediatrician, to a large extent, is becoming the family guide and friend, and he has fallen heir to a part, at least, of the place of the family doctor, and this is as it should be, for, if the modern pediatrician is able to bring the best of modern science and preventive medicine into the home, and at the same time maintain some of the reverence and love which the past generation held for its family physician, he is uniting the two greatest elements in the practice of medicine, and has accomplished a task for which the medical profession as a whole will be much more greatly indebted than it will ever realize. Those of you who are sincerely interested in the profession of medicine, and who happened to run across the committee report of the Illinois State Medical Society, which was extensively reviewed in a recent number of one of the lay weeklies, which discussed the reaction of the man in the street toward the medical profession, have had food for serious thought. It seems to me that a large part of the distrust or lack of confidence on the part of the laity toward the physician which was brought out in the report is due to the recent lack of personal touch and intimate relationship which the physician of the past held in the family circle.

To visualize the situation as a whole, let us consider pediatrics as developing along three lines, starting from a given point; the point is the health of the child; the three lines, the tendencies we have been discussing. We must admit that to a certain extent, at least, these lines have had a tendency to diverge, and the problem of the future is to take these three lines at the points they have reached and make them

them converge, or, at least, run a parallel course. As Dr. Holt stated it, the pediatric society should contain representatives of all three groups in order that these developments might be correlated. While this may be true for the society membership, it is my feeling that there must be a closer unity of purpose in the subject of pediatrics itself as it is practiced and taught. To the laboratory scientist we owe much of our past progress, and we require much of him in the future. The working out of practical biological methods of prevention of the infectious diseases lies wholly in his province. For this purpose we must rely upon our heavily endowed departments in our universities, and even more upon the institutions of research, for I do not believe that we can expect much from the pediatrician himself along such lines, except as he tests out the scientific and practical use of such methods and brings about their actual use in the field. For illustration, let me cite toxin-antitoxin whose value depends upon its almost universal use in the last few months of the infant's first year. The scientist has done his work, and it is now the problem of the pediatrician and the family physician. Unless actual use is made of a scientific method, the greatest value of the scientist's work goes for naught. If I may be permitted to use an illustration from the field of commerce, the successful corporation must pay as much attention to its sales department as to its production department, and the two must cooperate and work hand in hand if the business is to be profitable and continue. An argument as to which is the more important is fatuous.

It has not been so much in the relationship existing between the scientist and the physician that our lines have diverged, as it has been between the practice of medicine in general and the trend of child hygiene. The problem is the same; that is, the health of the child. The difference lies in the fact that the physician has been looking upon the problem of the child from one viewpoint and the hygienist from another, but both are looking upon the same object. The physician has been steeped in his line of thought for generations—he is sceptical of methods that have sprung up overnight like mushrooms and is worried lest some be toadstools. The child hygienist is *nouveau riche* in an old, well established community. Like the *nouveau riche*, much of his wealth is probably real—the prevention of disease is much more important than the treatment of disease, and in this respect his viewpoint is absolutely sound—but society has frequently found that the methods of the *nouveau riche* are questionable and require discipline. The pedia-

tricians have as a group accepted the child hygiene movement point of view and most of us, I know, are putting it into practice in our everyday work. This is not true of the medical profession as a whole, so far as it relates to methods, but, as an example of the change which is gradually coming about, one has only to cite the slogan of the California State Medical Society, "Every physician's office a health center." What has been divergent in the lines of the practice of pediatrics by the physician and by the hygienist has not been a question of the object, but of the methods employed. I have not seen fit to change the view expressed last year before the Child Health Association that the physician is the individual best situated to apply the principles of child hygiene. I personally am quite tired of the attitude of criticism toward the medical profession on the part of many child hygiene enthusiasts, although I am glad to be able to say that most of these criticisms come from those who have only a limited or superficial knowledge of what child hygiene implies.

ENLARGING VISION

The gist of the whole matter is this. In recent years the subject of pediatrics has undergone a remarkable development. The scientific study of medicine has brought a tremendous increase in our knowledge of disease, of its pathogenesis, treatment, and prevention. This has developed and accumulated so rapidly that a superman would find difficulty in correlating the knowledge that has been brought to light by the mass of workers in every field of medicine. To glean the essential from this material and to pass it on to our students is a task that has taxed our medical school teaching. But even more important than this medical development, so far as the subject of pediatrics is concerned—and the child hygiene movement has been a distinct factor in bringing this about—our whole conception or vision of the subject has been changing and enlarging. No longer is pediatrics a combination of infant feeding and the study and treatment of the sick infant or child. We know today that our problem is much bigger and more comprehensive and that it involves all aspects of the child and child health. Its scope, as I have stated before, is the study of the biological problems of the child. As far as the future is concerned, I do not believe that this conception is too broad to be grasped or taught, or that three distinct types of teachers are necessary. While it may be true that one teacher is particularly interested in nutrition, another in infections, one in men-

tal hygiene, another in preventive pediatrics, etc., every teacher must have this broad conception of his subject as a whole and of its many interrelated parts if he is to have an adequate grasp of the rôle of his own particular line of interest. The future of pediatrics, in my opinion, lies not simply in the development of scientific research, nor in the scientific treatment of disease, nor in the extension of the present developments of child hygiene, but rather in the ability of those of us who are now pediatricians to grasp a broad conception of the subject and to put this broad conception into actual daily use in our practice, and perhaps even more particularly does it depend on the extent to which those of us who are teaching in our medical schools are able to get this viewpoint across to the pediatricians and practitioners of the future.

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GROWTH OF OUR KNOWLEDGE OF INFANT FEEDING SINCE THE NINETEENTH CENTURY

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College, Chicago, Ill.

At the beginning of the present century in this country there was but one generalized method of infant feeding which was at all recognized by the leading men in the profession, the so-called percentage method. This was a method that had its origin in Boston and was largely the creation of Dr. Rotch. It was very ably championed by Dr. Holt, and was accepted by nearly all the practitioners among children, who pretended to have any scientific knowledge of medicine. This method consists in the application, theoretically, of such scientific knowledge as was then in our possession of the various chemical elements which went to make up breast milk and cow's milk. As it was used, it consisted very largely in figuring out the percentages of the various foodstuffs to be used. Practically, as then employed, these formulæ consisted of high percentages of fats, low percentages of protein, high percentage of sugars, the sugar used being practically always milk sugar, with the addition of alkalis in the form of bicarbonate of soda or lime water. The formulæ thus prepared were meant to simulate, as nearly as possible, the composition of breast milk. It was well recognized then, as now, that breast milk was the only physiologic food for infants and it was argued that the chemical constituents of artificial food should approximate, as nearly as possible, those of breast milk.

This method of feeding came most nearly, at that time, to applying scientific principles to infant feeding. It is true that previous to this period, some scientific work had been done in the metabolism of infants by Camerer and others, but this knowledge had not been as yet applied scientifically and had not been very generally recognized.

During the last twenty years infant feeding may be said to have advanced along two lines: first, there has been the study of gastrointestinal disturbances and their therapy; and, second, there has been the attempt to determine how much of infant nutrition depended upon outside factors. The former of these efforts has been very exhaustively and successfully carried out from a scientific standpoint. The latter has been worked upon almost without exception empirically.

In the study of the gastro-intestinal disturbances among the first things to take form was their classification. Czerny and Keller, in their book published in 1905, attempted to classify gastro-intestinal disturbances in infancy on the basis of etiology. Soon after this Finkelstein brought out his classification based purely on clinical findings. While both of these classifications have been used, both have been modified, and both have their supporters and detractors, the classification of Finkelstein probably has had somewhat wider acceptance, especially in this country. Soon after the appearance of these classifications there began a very exhaustive study of the chemistry of the various food-stuffs in their relation to health and disease. The first study was fat, then protein, then the carbohydrates and, finally, the various inorganic salts and water. In regard to the normal infant the facts brought out by this intensive study changed but little our ideas of infant feeding. They did, however, convince us of the fact that simple formulæ were just as effective as the more complicated ones in maintaining the health of the baby. The study of the different elements, however, did have a profound effect upon our ideas regarding nutritional disturbances. We began to see that what we had regarded as disturbances largely produced by digestive disorders, were in fact far more in the nature of metabolic changes than digestive; that the organism as a whole was profoundly affected by these conditions and that digestion, or rather indigestion, played but a subordinate rôle.

After the study of the various elements there was brought to the attention of the world, largely by American investigators, the fact that elements which we had not previously known, might have a profound effect upon the chemistry of the organism and by their absence from the food or by their deficiency in it produce profound disturbances of internal metabolism. I speak, of course, of the vitamins.

We are by no means at the end of investigations of this nature. The chemical problems encountered are very intricate ones and it is impossible to consider one of the elements without taking into consideration all of the others. Certain things, however, have come to light which have made it possible to treat with increasing efficacy many of these disturbances. It has been shown, for instance, that the proteins of cow's milk, whether casein or lactalbumin, are probably not to be seriously considered as disturbing elements in the food. The relation of fat to constipation has at least been studied sufficiently to bring out an effective treatment for fat constipation. The relative importance of the various elements and the causation of mild diarrheas which in

Finkelstein's classification are known as dyspepsias, have been largely determined with the result that in only comparatively few cases do these conditions go on to a more serious state.

More recently the trend has been towards the study of the acid alkali conditions in these various nutritional disorders and there is a marked tendency now to look upon the inorganic salts and their relation to such disturbances, especially as regards their effect upon the acid alkali equilibrium as of prime importance.

In the early eighties of the last century, during the first blush of bacteriological investigation, much more was said regarding the pathogenic relation of the intestinal flora to nutritional disturbances than subsequently. At the present time, however, there is a tendency, especially among German pediatricians, to swing back to a more thorough investigation of bacteriological conditions within the gastro-intestinal tract of the infant, especially in the etiology of diarrheal disturbances. There is more of a tendency to ascribe to the colon bacillus a certain rôle in the production of these disturbances and especially of that severe form known variously as intoxication, toxicosis and so forth.

This brief review of the work which has been done during what may be termed the chemical period of medicine, has not taken into consideration the exhaustive investigations which have recently been carried on with respect to the etiology of scurvy and rickets. Investigations of these two diseases have been made largely since the discovery of vitamins and have led to much very valuable information, not only regarding the disease in question, but regarding general metabolic processes, and more especially the calcium and phosphorus conditions within the organism.

If we should leave the question here, we would leave out of consideration certain practical results which have been more far reaching in the good to humanity than even these exhaustive researches, important as they are. All over the world during the past quarter of a century there has been a marked interest manifested in the care and feeding of infants. This interest has manifested itself in the establishment of stations, among other things, for the care of healthy infants. In these stations the attempt has been not to cure sick babies, but to keep well babies well. The prime object of such work has been the promotion of breast nursing with the result that a much larger proportion of infants are kept at the breast for a longer or shorter period and, also, that the indications for removal of the child from the breast have been much more carefully considered and much more conservatively advised. Not

only has this been true, but there has been a careful study from a practical standpoint of the hygienic factors which influence the nutrition of the child, with the result that cleanliness, fresh air and sunshine have been proved to be very necessary to the health of the baby. It has been shown very conclusively that without control of these outside factors, no matter how good the food may be, nor how well prepared the formula, nor how scientifically exact its various constituents, results cannot be obtained and infant life cannot be preserved unless these factors are thoroughly looked after.

These, however, have not been the only factors with which we have had to deal. Any man who has had much to do with the feeding of infants, and any nurse who has observed the effects of various foods upon the babies brought to the station, realizes that there is another element which enters into child health. The nervous environment in which the child lives, the disciplinary measures to which it is subjected, play a large part in the success of infant feeding. One is especially struck with this in private practice, and successes and failures in given cases often depend, to a great extent, upon the control which the doctor may have of this one element.

THE RESULT

What has been the result of all this investigation and practical application? There is now being raised the question whether the saving of infants' lives is worth while; whether the race would not be better off if the unfit were allowed to perish and the so-called sturdier elements to persist. I do not propose to go into the discussion of this question. Whatever may be the answer in other countries where population is so much greater than food supply, in the United States where we need population this question can only be answered in the affirmative; the infant is an asset to the state and as such should be carefully fostered. Taking this as our background, those who have been engaged in child saving during the last twenty-five years may, I think, look with pride upon their handiwork, and especially in the realm of infant feeding. It is not so long since the curve of infant death rate during the summer months was so appallingly high that every mother with a baby shuddered at the prospect of hot weather, and the second summer was something to be approached with awe. In the last twenty-five years we have seen that condition change. The death rate from diarrheal diseases in the summer months has been cut, not in half, but far more than that. It now amounts to little more than one-third of what it was previously and

in the infant welfare societies in our cities and smaller towns where competent men and women have charge of the lives of these babies, the gastro-intestinal disturbances in summer are not nearly so dreaded as the respiratory disorders of the winter. We can expect no such advances in the future. Our efforts must be directed rather toward the dissemination of what knowledge we have than toward the accumulation of more knowledge, important as that is. I do not mean to suggest for an instant that we should rest content in our present knowledge of the science and practice of infant feeding, but I do feel that what we need now is a wider distribution of that knowledge and a more extensive recognition of the things which we already know and which have proven so effective when properly applied.

STANDARDS OF NUTRITION AND GROWTH

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Different methods have been tried for arriving at the correct weight of children as a standard for their metabolism and growth, and as an index of their health. The various standards of nutrition and growth which are in use at the present time may be divided into three groups according to the principle involved in establishing the standard. The standards which have, by far, the most widespread use are those which attempt to set up certain height-weight values in relation to age. For the most part, large groups of children are weighed and measured, and an average, or a mean weight for height and age, is determined.

At the present time, four sets of standards which involve this first principle are used. Wood's¹ tables arrange various heights which are within the limits of normal for a given age, separate figures being allowed for the two sexes. For each height in inches within the normal for this age, there is a corresponding body weight, this weight being the average for all children at the given height and age. Figures are given only for school children from five to eighteen years of age.

Emerson² has arranged tables which show an average height for each age level with a corresponding average weight. A variation from this average weight which amounts to less than 7 per cent may be considered within the limits of normal, whereas a variation of more than this arbitrary 7 per cent classifies the individual as undernourished. When the actual weight is more than 20 per cent above this average weight, the individual is considered overweight and probably equally malnourished. No allowance is made in these tables for variation in height for a given age.

¹ Weight-Height-Age Tables, Child Health Organization (1918).

² Tables, "Nutrition and Growth in Children," N. Y., D. Appleton & Co. (1922).

Recently tables have been prepared by Baldwin¹ and Wood for children of school age and by Woodbury for infants and pre-school age which give figures of average weight for height and age. The subjects were American born children, who were presumably healthy, from selected schools in American cities. These tables attempt to show the annual increment of growth, and divide the subjects into tall, medium and short children. Average weights for each height, irrespective of age, are also given. These tables differ little in principle from those described by Wood.

Gray² has measured healthy boys in private schools in Boston who come from Anglo-Saxon parentage, and who are free from gross physical defects. He has been impressed by the value of estimation of the chest girth on quiet respiration in relation to body weight. He finds that variations in one produce corresponding changes in the other. He has prepared tables which show average chest girths for varying heights with estimated body weights. He chooses to call these ideal weights to which an individual may be expected to reach.

A second principle which has been proposed as a standard for nutrition is an estimation of the amount or the specific gravity of the superficial layers of body fat. Methods have been devised by Oeder,³ Batkin,⁴ Peiser,⁵ Newmann,⁶ Jamin and Mueller,⁷ and by Rubner, but they have found no general application as a practical plan for studying large groups of children. Sufficient experimental data on the fat layer have not yet been accumulated to give this principle a practical value. The thickness of the fat layer taken as part of a subjective judgment of firmness and distribution, however, may be made to serve as a reliable indication of nutrition.

Recently numerous formulæ for expressing nutrition values have been devised as a third principle in estimating body weight in relation to health. Most notable among these formulæ are the ones used by

¹ Weight-Height-Age Tables, N. Y. C., American Child Health Association, (1923).

² *American Journal of Physical Anthropology*, V (1922), 251; *Boston Medical & Surgical Journal*, 177 (1917), 894; 184 (1921), 334; 185 (1921), 28; *American Journal of Diseases of Children*, XXII (1921), 272 and 259; XXIII (1922), 226 and 406; *American Journal of Physical Anthropology*, IV (1921), 231; *Archives of Internal Medicine* XXVI (1920), 133.

³ *Fortschritte der Medizin*, XXIX (1911), 961; *Medizinische Klinik*, V¹ (1909), 461; V² (1909), 1225.

⁴ *Jahrbuch für Kinderheilkunde*, LXXXII (1915), 103.

⁵ *Jahrbuch für Kinderheilkunde*, XCV (1921), 195.

⁶ *Jahrbuch für Kinderheilkunde*, LXXV (1912), 481.

⁷ *Münchener Medizinische Wochenschrift*, 50² (1903), 1454 and 1511.

von Pirquet¹ and by Dreyer and Hanson.² Other formulæ have been expressed by Rohrer,³ Oppenheimer,⁴ Bornhardt,⁵ and Bardeen.⁶ These formulæ express a constant relationship between the body weight and one or more easily determined measurements. The expressed values are only approximate, being fairly reliable within only small range. They are all rendered unreliable because the height or any other linear measurement can be but one of the three dimensions composing the volume of body weight, leaving two unknown factors for solution with but one equation. The attempt to find a constant obviously will result instead in a wide variant. Dreyer and Hanson² particularly have utilized the chest girth measure as the linear measure in calculating a formula. They have also utilized with this an estimation of the vital capacity of the lungs calculated from the chest expansion. The average of two weights, one as determined from the table of stem lengths, and the other from the circumference of the chest, expresses the correct body weight.

The tables prepared by Baldwin, Wood and Woodbury make allowance for the annual increase in total body height, and these workers state that this may be considered a criterion of greater importance than the height or weight at any given age. My own observations on children convince me firmly that this is true, though a gain in weight which is consistent is of almost equal importance. These tables show that the range of height for a given age increases as the age increases. This might be taken to indicate that the differentiation into tall, normal medium and short children is more pronounced in older children. Numerous workers have observed the irregular gains in body height, there being a strong tendency for children to develop in but one direction at a time. Stratz⁷ considers that the first period of filling out or increase in volume occurs during the second, third and fourth years. From then to the eighth year the predominating direction of growth is linear or height. During the eighth, ninth and tenth years a second filling out occurs, while linear growth again predominates from the

¹ *Zeitschrift für Kinderheilkunde*, VI (1913), 253; XIV (1916), 211. *Pelidisi Tafel*, (1919), Bd. 2, 5, 288.

² *Assessment of Physical Fitness* (London, 1920).

³ *Korrespondenzblatt der deutschen Gesellschaft für Anthropologie*, Bd. 39.

⁴ *Deutsche Medizinische Wochenschrift*, XXXV (1909), 1835.

⁵ *St. Petersburger Medizinische Wochenschrift*, III (1886), 108; V (1888), 413. *American Journal of Diseases of Children*, XXIII (1922), 226.

⁶ Publication 272, Carnegie Institution of Washington (1920).

⁷ *Der Körper und seine Pflege* (Stuttgart, 1922).

eleventh to the fifteenth year during puberty. The differentiation between sexes is also greatest during this second period of growth. The maximum adult growth in height is almost attained by the end of puberty, the remaining years of adolescence being a period of increase in volume. The tables of Baldwin and Wood indicate that the increase in linear growth during puberty is greatest in extent and occurs at an earlier age in the tall children and least in the short children. Interest in standards of growth has revealed that our information is very meager and that unexplained wide variations frequently occur. I have recently witnessed an increase of seven inches in body height in a fourteen-year-old boy over a period of only five months following a tonsillectomy. Previous to this he had suffered from an attack of acute hemorrhagic nephritis.

The problem often confronts us for decision as to whether or not a given individual is in good health and we now come to know that a proper weight in relation to height and age is one of the best indices of that sound health and nutrition. In an effort to determine whether that proper weight is correct, we have been led to draw comparisons with other individuals who may be in sound health. And it has seemed proper that for comparison, as large a group as possible of carefully selected individuals should be measured and grouped for a standard. This we choose to call an average for individuals within this group. Having formulated such standards, we feel in a position to go back in our argument and maintain that when we encounter an individual of a certain age and height, he must show a certain body weight. Then we have ceased to deal with averages and are attempting to establish a normal for the individual. But the legitimate variations from the average are many and must be duly considered in handling the individual. We may establish averages for groups, but in considering an individual we are seeking after his normal which may or may not coincide with an average. Gray has chosen to create standards of ideal weights, heights and nutritional conditions. Certainly the average is a low level to be set as a goal for our sound health policies. It should be the higher ideal weight, the theoretical normal for the individual for which we are striving. Therein lies the weakness of any set of standards. And these limitations of all standard tables must be recognized. The complete clinical picture of the child's physical fitness must include not only weight, height and age relations but also such other signs as we have come to know are associated with sound health, such as a moderate amount of firm, evenly distributed body fat; muscles well filled out,

firm and well coordinated; a skin which is warm, elastic, firm and soft; a full color to the circulating blood; proper bodily mechanics, and a vital capacity, 60 per cent or more of the total lung capacity. These criteria cannot be determined by standards for comparison, but must necessarily be dependent for correctness on the skill and experience of the examiner.

BODY TYPES

In examining any group of children, one cannot but be impressed with the wide variation in the physical appearance of their bodies. Closer examination and questioning reveal that all these children may be equally healthy, happy and free from disease or physical defects. For a long time we have been dimly conscious that we have been dealing with children who may be tall, or short or medium. Further study shows that these children present certain characteristics which are peculiar to the type of their bodies. Considerable emphasis and study have been placed recently on these body types and it is possible that some solution may be forthcoming for the wide variation of the individuals from the average of groups. It has been my experience that many children may vary more than 7 per cent, even as much as 15 per cent, from the average and still appear to be in sound health. Without exception they show certain characteristics of body type. These characteristics, for the most part, run true to form, but occasionally one may encounter an individual who presents a mixed type and the picture may be confused.

These types have received attention from numerous workers and they must be seriously considered in dealing with individual subjects. The extremes are the tall thin type with colicocephalic skull on the one hand and the short thick type with the brachycephalic skull on the other, with all gradations in between. Mills¹ describes the tall thin type as the asthenic individual with lesser degrees of hyposthenia, to normal, then hypersthenic and full sthenic as the opposite extreme. Bean² uses the term hyperontomorph for the former type and hypoontomorph for the latter. Both Stockard³ and Mills¹ have described these types in detail so that one may recognize the characteristics presented by each.

One naturally looks about for some explanation of the phenomena

¹ *American Journal of Roentgenology*, VIII (1917), 155.

² *American Journal of Physical Anthropology*, V (1922), 349.

³ *American Journal of Anatomy*, XXXI (1923), 261.

which produces these wide variations, and for causes which may be responsible for such differentiation into types. Stockard has directed attention to certain inherited glandular differences or abnormalities. The differentiation may be due to environmental factors as well, and he considers that the lateral short type predominates in inland districts, while the tall type may be found in districts nearer the sea. One must also consider the natural laws of heredity in transmission of these types.

These two types may often be difficult to recognize in children and the existence of occasional mixed types may add to the difficulty. The differentiation may occur early in extreme types during the pre-school age, rarely in infancy, though the more common period is in the early school age. The differentiation becomes complete and final by the end of puberty. Neither of these two extremes of body habitus can be considered pathological though it is true that the subjects may often complain of certain symptoms characteristic for the type. For example, the high mouth, deflected nasal septum, bad turbinate bones and delicate mucous membranes of the lineal type may be frequently associated with a tendency to respiratory infection. Emerson has observed that of all the physical defects associated with malnutrition and underweight, respiratory infections are very numerous. An explanation of this observation may be that many children of the lateral type who are underweight from other causes are frequently overlooked when routine height-weight nutrition standards are applied alone. It is evident that one must consider the body type idea and its application to average height-weight for age standards. For example a child of lateral type, not quite 7 per cent underweight by the average values, may be very much more under its own theoretical normal weight and still escape notice, while a lineal child, apparently underweight, may cause considerable anxiety and distress by its failure to gain under forced nutrition, owing to the fact that it is already in metabolic equilibrium. We have seen numerous children who were in sound health by every criterion save for the underweight when compared to age and height. At the present time it is not clear just what value should be given for the degree of type variation. It seems to us that the 20 per cent allowed by Emerson for overweight is a reasonable value for the lateral or sthenic type. When one encounters the lineal or asthenic child, full 15 per cent may be allowed off the estimated body weight for height and age. In determining the amount to be allowed off for the degree of asthenia, one must consider carefully other criteria of undernutrition which may be present.

Our own experience in studying children has been drawn from greatly differing sources. The children who visit the Cardiac Clinic of the Washington University Dispensary with potential or active heart diseases have been observed over varying periods of time. They have all shown major physical defects. A large group has been studied at Ridge Farm, the Country Convalescent Department of the St. Louis Children's Hospital. This group of children were being cared for especially for their malnutrition whether or not it was associated with major physical defects. Another group of children have been under observation for a period of some eight years at a well conducted Orphan's Home in the country where ample food, rest and regulated activities could be provided. The children in these groups have come from the lower and middle strata of society, many of them from bad hygiene and mental environment, and all in a state of recognizable malnutrition. A fourth group includes the children in a private school who come from well-to-do families and who have had well regulated care since birth. A certain number of private cases form a last group. From a study of these groups we feel that the nutritional state at the time of the examination furnishes a satisfactory estimation of what has been the child's past environment, either physical or mental; that it furnishes us with a fairly satisfactory estimate of the child's fitness to undertake those functions which surround him; and that in the fulfillment of these functions and duties due to this physical fitness, the greatest joy is added to the child's mind.

VALUE FOR THE MALNOURISHED

The value of standards of growth and nutrition should be obvious to all who have to do with healthy or undernourished children. Much has been written and is being discussed about health activities for children in school. I should like to direct attention to the fact that such standards for comparison are extremely useful in the care of sick or malnourished children as well. Periodic examinations and estimation of increase in body weight and height often furnish a most useful guide in directing the course of illness in these children. Children from whom all major physical defects can be removed invariably and immediately show gains in weight. Those children who remain with a physical defect which cannot be removed, for example, chronic heart disease or tuberculosis of a bone, show consistent gains which furnish a real in-

sight into the child's progress. A child who, under proper care and environment, cannot be made to gain in weight has a very bad prognosis for recovery from his illness. This is particularly true of cardiac children. Again, consistent gains in weight furnish evidence of practical value for these cardiac children since it is possible to regulate the degree and extent of exercise by the presence or absence of gains from week to week. The exercises may be restricted to that kind and degree which will allow the child to continue to gain weight.

It has been interesting to observe the children at Ridge Farm who are gaining weight under conditions favorable to forced nutrition. A theoretical normal body weight for height and age, body type and state of nutrition is estimated for each child. The weekly weights plotted in curves take a characteristic form. The curve rises sharply at first when the child is admitted; then the weekly gains fall less and less, making the curve eventually to coincide with the straight line curve of the estimated normal periodic gains in weight. We have come to rely on this characteristic flattening out of the curve as an indication that we have correctly estimated the theoretical normal individual weight. Variations occur and we see that the curve takes a bizarre or unexpected turn. Either unexpected events occur at such times, or it seems evident that we have incorrectly estimated the theoretical weight.

Our observations compel us to conclude that, as yet, we do not possess a wholly reliable single standard of nutrition and growth. Numerous group values are available which involve some single criterion, but many variations occur which render the principle unreliable. The individual child must be judged from numerous viewpoints which include his weight for height and age, his body habitus, the nutritional state of his skin, body fat, muscles and blood, and the presence or absence of physical defects. When these factors are correlated and appraised, then, and only then, can we judge what may be the individual's ideal or theoretical normal weight. The future holds much of promise when we shall know more of the total metabolism of the child, the phenomena involved in growth and adolescence, and the factors which influence nutrition.

DISCUSSION

Mr. Gebhart, New York City: It is very interesting to those of us who have been following the recent studies in the growth and development of children to note that medical men are themselves paying more and more attention to that factor in the health of the child. Those of you who attended the meeting last night will

recall that Dr. Dublin and I presented some material which we had analyzed and which led to about the same conclusions as those reached by Dr. McCulloch. We had an opportunity to gather the heights and weight of four thousand Italian children in a district in New York City where we were conducting examinations for the detection of physical defects. The children were given a complete examination by Dr. Schroeder, and later by Dr. Denzer, including a careful assessment of nutrition.

We had a rather unusual opportunity for testing the commonly accepted height-weight standards. We expected, of course, that since we were dealing with a group of Italian children, who deviate quite markedly from the national type in build, there would be a marked discrepancy between the doctor's selection and that made by the 7 per cent and 10 per cent limits of the Wood-Baldwin-Woodbury tables; but we were amazed to find the digression so large. I think our conclusions may be summed up by saying that of all the children who were called undernourished by the doctor, approximately 75 per cent would have been missed by the Wood-Baldwin-Woodbury norms. In other words, the great majority of the children who were, in the judgment of the doctor, in need of nutritional care would have been missed entirely. That seemed an amazing thing, and we then concluded that if we had a table made up of average weights of Italian children, suited to their own build, better agreement would have followed. We therefore took these four thousand children and computed their average weight for age. We then took a 7 per cent limit of underweight and we found that even this standard would have missed approximately 50 per cent. It was then apparent that a child might be only slightly underweight, but still be seriously undernourished.

We found later that while our study was in progress, the United States Government had been doing the same thing with about ten thousand children of native parentage. We found that the 10 per cent limit applied to this group would again have picked out about 50 per cent of all the children who were actually in need of care. It seemed to us, therefore, that we had corroborating evidence from a large group of children of the failure of height-weight norms to select adequately, undernourished children. Of course, we must keep in mind, especially after what Dr. McCulloch has said, the fact that we were dealing with a particular type of child, with children who gave an unusual history of rickets which had had a marked effect upon their growth and development, and had tended to give them a short and rather stocky build with poor musculature and unhealthy fat. Poor nutrition is not so much a question of underweight as it is of low body tone.

I think that we need further studies of this kind with other groups, for example, of children from well-to-do homes of native American stock, to see how the doctor's judgment and the weight tables would work out. But I was particularly interested in what Dr. McCulloch had to say about various types of build, for I am sure our common sense tells us that people do fall naturally into general physical types. There are short slender types, and short stocky types, and tall slender types. Various attempts have been made by anthropologists to classify them, but not successfully. The principle, however, is perfectly sound, and it offers a very fertile field, particularly in that branch of pediatrics to which Dr. Veeder has just referred. I think we have to accumulate more evidence of this

kind and that there should be a closer cooperation between the doctor, the clinician and the research men who have been accumulating material of this kind for a good many years.

I hope this paper will be followed by similar studies, and that more attention will be given, not only to height and weight, but to a recognition of the fact that height and weight norms are not the only means of determining the child's nutritional status, but that we must have an assessment of all these other factors to get a true picture and one which is fair to the child.

Dr. L. C. Schroeder, New York City: Height and weight tables will always be useful, but we must not forget that in judging nutrition, other factors come into play. The danger lies in ignoring these other factors. I asked one of the younger doctors in charge of a malnutrition class how he liked the height and weight tables. He said they were one of his best checks, but he felt that sometimes they were wrong, and so strong was the appeal of printed figures that he was tempted to set them up as the final word. "One youngster I examined the other day," he continued, "was distinctly a malnutrition case, but the tables showed he was only 3 per cent underweight, and I did not have the nerve to classify him as such." This incident teaches its own lesson.

Dr. Eleanor A. Campbell, New York City: We are in a district adjacent to that where Dr. Gebhart made his study of Italian children during the past two years. We have some two thousand of the same kind of children—Italians. Almost from the beginning, we found that we could not select for our nutritional classes by weight and height tables. We have had children whose hemoglobin was 70, 60 and 50 below who have been of normal weight, or only slightly below; so for the past two years we have selected the cases for our intensive work by the physical examination, placing emphasis on musculature, color, and hemoglobin. We have regarded as needing treatment the children who have bad musculature, kinetic defects, or who slumped when we took their height so that they were perhaps two inches below what they would be if their muscles would let them stand up. That fact alone makes the weight and height proportion wrong.

THE PRESENT STATUS OF OUR KNOWLEDGE OF MENTAL DEVELOPMENT AND MENTAL HYGIENE OF THE CHILD

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The history of the understanding and treatment of the mentally afflicted parallels, in many respects, the historical development in the other fields of medicine, and we find in the mental hygiene enterprises of today programs exactly similar to those used in other fields of preventive medicine. Childhood, as has been said many times before, is the golden period for mental hygiene, just as it is the golden period for inculcation of the principles of all hygiene. Hence no greater opportunities are presented to any group for the prevention of mental disease than exist for those specialists of medicine devoting their lives to the understanding, prevention and treatment of childhood disorders and diseases.

In the Middle Ages, the behavior of the insane was usually regarded either as the result of divine inspiration, or of possession by the devil, and the latter viewpoint seems to have been more frequently taken than the former. Insane behavior, or "craziness," was regarded as not capable of being understood, hence no attempt was made to understand it. This attitude, born of ignorance, gave rise to fear, which always accompanies ignorance, and was the great obstacle to the removal of the envelope of mystery surrounding the present understanding of human behavior. Even after the literal application of the doctrine of possession by the devil passed out of existence, there remained, and in certain quarters exists today, a certain attitude toward the disordered mind which grew out of that superstition.

The thing we term personality was regarded by the ancient writers as an attribute of the body as a whole. Aristotle thought of the heart as the *sensorium commune* of the body, and he could discover no nervous function whatever for the brain. Vesalius, in the 16th century, was apparently the first to regard personality as of strictly nervous origin. He said that the brain was concerned with the animal spirit, by which he meant the capacity to think, to reason, to remember and to imagine, but he wrote in 1543, "How the brain performs its functions, in imagination, in reasoning, in thinking and in memory, I can form no opinion whatever." The common lay mind still regards personality as a vague, ill-defined quality of the body as a whole, and not of one system of or-

gans. Notwithstanding the fact that science has shown conclusively that personality and mind are functions of the brain, society still clings tenaciously to the belief of Aristotle, as shown by the heart on the valentine as the organ of affection. And any attempt to promote the sale of valentines picturing the true organ of affection, the cerebral cortex, would probably be viewed with extreme suspicion by the majority.

The working out of the mental mechanisms controlling human behavior, is a comparatively recent development. These mechanisms begin to operate almost at birth, and they continue to do so throughout life. The molding or training of their operation during childhood will, in a very large measure, determine how they shall operate in adult life, and hence how the adult shall behave. The mind has been likened to the iceberg. Nine-tenths of the iceberg is submerged and only one-tenth visible. Forces which control the behavior of the iceberg are more submerged than visible and we understand, then, why the iceberg moves contrary to the wind and other forces acting upon the visible portions. So, with the mind, forces acting upon the submerged portion, the subconscious, control the behavior often in very contrary fashion to those acting upon the more apparent or conscious portion.

Our investigations have shown us that the subconscious contains the record of its thousands of years of development just as truly as our bodies give record of the evolutionary development of the race. The progress of bodily development has come by overcoming resistances in the physical environment and, in exactly the same way, the present mental subconscious equipment is the result of resistances in the development of the race. These resistances have come chiefly in the form of adjustments to the complex conditions of a gregarious existence. Greater and greater abandonment of the selfish desires on the part of the personality in favor of more remote ambitions is increasingly necessary as the complexity of society increases. The unwillingness or inability on the part of one individual subconscious mind to meet this necessity, hence to make its adjustment, gives us the picture of a psychoneurosis, psychosis or otherwise psychopathic behavior. Throughout life, then, there is a constant struggle between desire, egotistic desire, or instinct on the one hand, and reality, in which the individual finds himself, on the other. We find evidences of the struggle in early infancy, and we see them at any age level that we may choose. We note the child personifying his dolls or toys, holding conversations with them, scolding them, and demanding behavior of one kind or another in them. This is the expression of the instinctive desire of the child to keep complete control

of his environment and of his unwillingness to accept reality, which he would have to do if he admitted to himself that the toys are inanimate. He is showing there the reaction to what White has called the safety motive. We have all seen the somewhat older child, perhaps aged 35, while losing steadily at cards, personify the cards and, in anger, throw them violently upon the table with a very positive assertion about his luck. And perhaps we can recall amongst our friends one, who, when he bumped against a chair in the dark, personified the chair with an oath, hurling it aside with such violence as to break it. These are reactions to the safety motive. They are expressions of the unwillingness of the personality to set aside its immediate desire and make the adjustment demanded by reality. Very often this subconscious conflict between the desire and reality is converted into a disorder of bodily function. This mechanism of conversion is seen most beautifully in the paralysis of hysterics, and we know that any bodily function may be disordered by this conversion mechanism, so that it invades all departments of medicine and is by far the largest single source of ailment which physicians are called upon to treat. It is to be noted in the study of the case histories of individuals exhibiting the conversion mechanism that, almost invariably, manifestations of the mechanism were present in the childhood period. Had these manifestations been recognized and understood in that childhood period, much later disability might have been avoided. The child who discovers that attacks of gastro-intestinal illness accompanied by a display of pain, will relieve him of the responsibility for impending unpleasant tasks, and thus finds a defense mechanism against stern reality, is thus developing habits of reaction to the safety motive which very soon in his life take on the character of the conversion mechanism. We need not be surprised then, in the adult period, when we note the very frequent use of the conversion mechanism in the production of fainting attacks, dyspnea, constipation, diarrhea, gastro-intestinal upsets, headaches, stuttering, menstrual disorders, aphonia, amaurosis or paralysis. These defense mechanisms, which have as a part of their purpose, defending of the individual from the knowledge of his own shortcomings, afford means to escape the straightforward and necessary way to meet situations in reality, if those situations are to be effectually handled.

As Watson has pointed out, the world is full of floating wrecks, the product of indulgent mothers who allowed the child to eat and do and play when it wished and what it wished, who put no authority upon it and even anticipated its demands. Defense mechanisms in the form of

kicking and screaming become well developed and no compensating burden bearing for his own mishaps was inculcated. So long as the favoring environment lasted, the personality floated, but as soon as a crisis occurred, which it must meet unaided, it lacked the assets with which to do it, and the result is a psychoneurotic, a psychotic or psychopath.

Our personality at any given time in life is, then, the result of what we start with and what we have lived through. It consists, in the main, of definite habit systems. In the so-called normal, these habit systems are conforming in character and have made the instinctive desires yield to social control by tempering in the school of reality. The disordered personality exhibits habit systems poorly schooled in reality, and instinctive desires still untrained to social control.

THE FIELD OF PREVENTION

In view of the more recent acquisitions of knowledge concerning mental mechanisms, it is no longer necessary to wait till the failure of adjustment occurs before we take action. Since we know that most of the mental diseases are mere products of habit systems established in childhood and are not visitations upon the individual, a golden opportunity presents itself in the field of prevention. No greater degree of mystery surrounds this field of prevention than surrounds the prevention of tuberculosis, or the prevention of infectious disease. In general, the earlier the training of adequate habit systems is started, the better the result, just as the early establishment of good nutritional habits bears the best results. Traditionally, we have more or less accepted the arbitrary, conventional chronological age level of the beginning of school-training as the period at which to begin such training as has been given children in mental hygiene. More often than not, any such training is conspicuous by its absence. And often, under the guise of child training, the unfortunate adolescent has been inflicted with much misinformation, particularly in the field of sex hygiene.

In some places, and probably the most noteworthy instance is the Merrill-Palmer School, under Dr. Helen T. Woolley's guidance, we see beginnings in real mental hygiene training at the proper time in life. Here we see children of from two to five years studied and treated as personalities undergoing habit formations designed to enable the child to handle his reactions to the safety motive so that he can meet reality in a frank straightforward manner. As a first step in this training is

the estimation of the child's personality and an evaluation of just where especial stress needs to be placed. This examination includes a careful physical examination, an investigation of the family history and social background, as well as a mental examination. The Stanford Revision of the Binet Test, probably the best known and most uniformly used scale in this country, is used as part of the examination, together with performance tests devised by Dr. Woolley to supplement the information obtained from the Stanford. One of these performance tests¹ consists of a pink tower, consisting of ten wooden cubes ranging in size from ten to one, to be piled in order of size. Standard directions are carefully given the child and the time and method of the child's performance carefully recorded. Another test consists of three sets of ten cylinders each to be fitted in corresponding holes in wooden frames. The first set of cylinders varies only in diameter, the second in both diameter and height and the third only in height. Here also standardized directions are given the child, and careful record made of the time and method employed by the child.

It is not my purpose, nor does the scope of this paper permit it, to discuss the interpretation of the results from such test, but I wish to invite attention to the fact that each child, when confronted with such a standardized task, has his own individual method of attack upon the task, and from the observation of his method is learned much concerning what habit systems have been built up in him. Notes are made of the child's type of reaction to incidents in his environment; in other words, his reactions to the greatest of all performance tests, reality. Then, by common sense methods, training is given this developing personality into those lines of habit system which will fit him to meet the issues of reality in a socially acceptable way.

As soon as the child enters the home, it should become one of the personalities of that home—not the personality which is to dominate the home completely, nor the personality to be completely submerged by the other personalities in the home. In the proper mental development of the child a frankness, born of common sense, must prevail. The child must be allowed to find expression for his emotions and interests in his contact with the other members of the family. But if this expression interferes with the rights or safety of others, it must be guided into other channels and not merely repressed. Punishment when necessary,

¹Helen R. Woolley and Elizabeth Cleveland, "Performance Tests for Three-, Four- and Five-year-old Children," *Journal of Experimental Psychology*, VI, No. 1, Feb., 1923.

and it is often necessary, should be fair, that is, the child must see the fairness in it, and it must be prompt. It must never inspire fear, and it must never be administered as a vent for the anger of the parent, who himself has difficulty in controlling his safety motive. Sex matters should be frankly and honestly handled and the amount and detail of sex instruction made in accordance with the ability of the child to understand. Frights in childhood, by creating abnormally great emotional responses, have their products in anxiety states of psychoneurotic type in adult life. Lying to children on the part of parents and teachers and the holding out of promises never to be fulfilled is, in no small way, responsible for deceitful habit systems which later produce delinquency and crime.

The assumption on the part of parents or teachers that peculiarities in reaction on the part of children will be outgrown is most dangerous, and must never be taken without thorough investigation. With such investigation, there will be left no place for such assumption.

Finally, we note from our knowledge of mental mechanisms, that a matter in no wise of least importance in the development of socially acceptable behavior is the fact that the parent and teacher must needs give much attention to his own habit systems.

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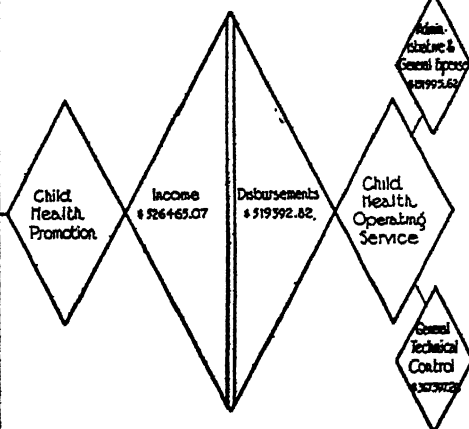
REPORTS

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AMERICAN CHILD HEALTH ASSOCIATION

Balance, Jan 1, 23 \$594.52
Contributions, Individual \$966.95
Interest & Refund \$1434.27
Memberships \$1845.39
Special Contribution for Demonstration \$49345.91
Royalties, Advertising, Sales Material, Magazines, Etcetera \$57,252.29
Contributions - Foundations and Organizations \$176989.04
A.R.A. Advances \$195696.40



Chief Executives & Assistants \$24646.80
Furniture & Fixtures, Alterations & Repairs \$29708.49
Office Management, Control of Records, Etcetera \$32174.88
Rent, Heat, Light, Telephone, Stationary, Postage, Etc. \$69467.43
Annual Meeting \$4930.14
Scholarships \$9273.77
Medical \$12312.30
Conferences & Advisory Service \$13474.22
Nursing \$4125.39
Public Health Relations \$16689.57
Research \$17896.75
Coordination Field Service \$39943.72
Special Contribution to Demonstration \$49345.91
Health Education \$91743.94
Publications \$97433.26

Jan. 1, 1923
to
Dec. 31, 1923

Membership October 1, 1922, to September 30, 1923

Compared with Corresponding Period for 1922

	Life members, 1910-1923	1923	1922
Alaska .....	.....	2	.....
Alabama .....	.....	24	7
Arizona .....	.....	12	2
Arkansas .....	.....	12	3
California .....	.....	172	78
Colorado	1	53	28
Connecticut	1	143	105
Delaware .....	.....	8	6
District of Columbia .....	.....	86	47
Florida .....	.....	18	3
Georgia .....	.....	38	14
Hawaii .....	.....	11	5
Idaho .....	.....	9	4
Illinois .....	.....	177	96
Indiana .....	.....	77	21
Iowa .....	.....	64	22
Kansas .....	.....	45	10
Kentucky .....	.....	48	16
Louisiana .....	.....	29	17
Maine .....	.....	27	9
Maryland	5	121	96
Massachusetts	1	301	136
Michigan	1	125	65
Minnesota	2	98	50
Mississippi .....	.....	11	1
Missouri	1	165	109
Montana .....	.....	15	3
Nebraska .....	.....	34	12
Nevada .....	.....	7	1
New Hampshire .....	.....	23	6
New Jersey .....	.....	143	49
New Mexico .....	.....	6	2
New York	3	835	328
North Carolina .....	.....	46	16
North Dakota .....	.....	19	3
Ohio	2	284	157
Oklahoma .....	.....	23	5
Oregon .....	.....	43	26
Pennsylvania	7	418	216
Philippine Islands .....	.....	7	6
Porto Rico .....	.....	1	.....
Rhode Island	1	27	16
South Carolina .....	.....	23	6
South Dakota .....	.....	19	7
Tennessee .....	.....	36	9
Texas .....	.....	59	16
Utah .....	.....	16	6
Vermont .....	.....	11	2

	Life members, 1910-1923	1923	1922
Virgin Islands		1	.....
Virginia		58	27
Washington		49	23
West Virginia		25	4
Wisconsin	7	81	36
Wyoming		5	2
Argentina		1	.....
Africa		2	.....
Australia		1	1
Austria		1	.....
Belgium		4	.....
Brazil		2	1
Canada		110	40
Chili		2	.....
China		14	3
Cuba		1	.....
Czechoslovakia		1	.....
Denmark		1	.....
England		14	7
Esthonia		1	.....
France		10	6
Greece		2	1
Holland		1	.....
India		4	2
Ireland .....		.....	1
Japan		8	.....
Mexico		5	.....
Montenegro .....		.....	1
New Zealand		4	4
Poland		1	1
Scotland		4	2
Serbia		1	.....
Siam		1	1
Spain .....		.....	1
Sweden		1	.....
Uruguay		2	.....
	32	4,389	2,006
Life Members		32	31
		4,421	2,037
Membership by Classes—1923 and 1922			
Sustaining Members		27	23
Contributing Members		86	108
Library Members		73	71
Affiliated Societies		379	320
Active		1,739	1,471
Health Workers and Teachers		2,071	.....
Life Members		32	31
Honorary		14	13
Total		4,421	2,037

AMERICAN CHILD HEALTH ASSOCIATION

REPORTS OF AFFILIATED SOCIETIES

For the Year Ending September 30, 1923

SUGGESTED OUTLINE FOR REPORTS

Name of organization.

Date organized.

City and street address.

Number on governing board. Men. Women. Total.

Name of president or chairman.

Aim or object of organization.

Scope of work: Federal. State. County. City. Town.

Population in territory covered: Urban. Rural.

Transportation facilities: Good. Fair. Poor.

Roads: Good. Fair. Poor.

TYPE OF WORK

	Home Visiting	Clinics	Classes	Hospital	Research	Health Center	Mobile Unit	Other
Maternal								
Pre-Natal								
Obstetrical								
Post-Natal								
Infancy								
Pre-School								
School								
Adolescence								
Other Adults								
Preventive								
Educational								
Own Publication								
Visual								
Dental								
Mental								
Cardiac								
Orthopedic								
Industrial								
Sickness *								
Communicable Disease....								
Tuberculosis								
Health Crusader								
Venereal Disease								
Special work								
Dependent Children								
Occupational Therapy ...								

* Under this heading, do not include Communicable Diseases, Tuberculosis, or Venereal Diseases.

STAFF

- Name and title of paid executive.
 Name of director or supervisor, medical service.
 Number of physicians: Full time. Part time. Paid. Volunteer.
 Name of Director or Supervisor, Nursing Service.
 Number of supervising nurses: General. Special.
 Number of staff nurses: General. Special.
 Name of Director or Supervisor, Dental Service.
 Number of dentists: Full time. Part time. Paid. Volunteer.
 Name of director or supervisor, social service.
 Number of social workers: Full time. Part time. Paid. Volunteer.
 Name of director or supervisor, nutritional service.
 Number of nutritionists. Full time. Part time. Paid. Volunteer.
 Number of clerical assistants.
 Number of volunteers with no special training.

Remarks:

FINANCIAL

- A. Total budget for the current fiscal year.
 B. How is your organization supported? Membership dues. Appropriation from city or state. Special contributions. Community chest.
 C. What method or methods have you found most successful in raising funds?
 D. What fee, if any, does your organization charge for its work?

COOPERATING AGENCIES

- A. Does your town, city or county have a Children's Council?
 B. Is there a Division of Child Hygiene in the Health Department of your State.
 County. City. Town.
 C. Please list below the names of all cooperating agencies:

AFFILIATED AGENCIES

- Please list below the names of your affiliated agencies: ¹
 Special conditions in community (not already covered) which have some bearing on the work of your organization:
 Annual report enclosed? Yes. No.
 Copies of records enclosed? Yes. No.
 Written or printed instructions to members of staff enclosed? Yes. No.

STATISTICAL

NOTE: If no Annual Report is enclosed, please give statistical information as follows:

Figures for fiscal year ending	Pre-Natal	Obstet- rical	Post-Natal	Infant care	Pre-School	* Older	
Average number patients enrolled at clinic..							
Number visits of patients to clinic.....							
Number home visits paid.....							
Total number patients given home care....							
Total number patients given hospital care..							
Infant mortality rate.....							

* Please give age limit.
 Supplemental Statement:

Submitted by:
 Title
 Date

N. B.—Please send your report to 370 Seventh Ave., New York, N. Y., AS SOON AS POSSIBLE, so that attention may be directed to your activities in the summary of the reports from Affiliated Societies, which will be prepared for the annual meeting. PLEASE SEND THREE COPIES OF THE SUPPLEMENTAL STATEMENT.

¹ Please list all agencies with whom you are doing a joint piece of work.

CALIFORNIA

Long Beach

LONG BEACH DAY NURSERY

Organized November 1, 1912.

Aim: Organized for the purpose of assisting working widows and deserted mothers, also widowers of small means to keep a home for their children.

Board: The governing board consists of 15 women.

Territory: The nursery serves an urban territory, which has a population of 75,000.

Staff: Members of the staff consists of a superintendent of the nursery, who is also supervisor of social service and nutrition work, one nurse, two doctors serving part time, teacher for part time and one housekeeper.

Type of work: A day nursery which receives boys from one to ten and girls from one to thirteen years of age. The homes are visited, classes are held for pre-school and school children. The children act as group leaders and help with games and in the kindergarten.

Financial: Supported by membership dues, appropriations, and special contributions. The Rotary Club Drive has been most successful in raising funds for the nursery.

General statement: The mothers' club organized over a year ago, has taken charge of the entertainments and summer outings during the past year and a very fine spirit of cooperation has been stimulated among the members.

Oakland

ALAMEDA COUNTY TUBERCULOSIS ASSOCIATION

Organized December, 1908.

Aim: Study, prevention and relief of tuberculosis.

Governing Board consists of 15 men and 8 women.

Territory: The Association serves an urban territory with a population of 410,000.

Staff: Executive Secretary. Nurse: 1 Supervisor of Nutritional Service. Clerical assistants: 1 full-time, 3 part time. Volunteer workers: Many (for Seal Sale).

Type of Work: Home visiting, clinic, classes, hospital and health center. Summer camps have been conducted and buildings started for permanent Preventorium for children at Del Valle Farm, Livermore, California.

Financial: The total budget for the year is \$50,508.50. The organization is supported by Seal Sale, membership dues, appropriations from the State, special contributions, and community chest.

General Statement: Public Health Center of Alameda County has taken over work started and sponsored by the Tuberculosis Association. Both are working closely together, the Association paying salary of nurse, and furnishing cars for transportation of different workers.

Santa Barbara

VISITING NURSE ASSOCIATION

Organized: 1908.

Aim: To furnish visiting nurse service to the community and to promote the interests of public health.

Government Board: The governing board consists of 14 men.

Territory: This Association serves a city and urban territory with a population of 28,000.

Staff: Superintendent. Doctors: 2 part time, 2 volunteers. Nurses: 1 supervising, 4 staff. Dental director, 1 part time dentist. Clerical assistants 1.

Type of work: Home nursing care for all ages; infant welfare, dental, and tuberculosis clinics, open air school and school nursing.

Financial: The total budget for the year is \$16,939.25. The organization is supported by membership dues, and contributions.

General statement: The Association cooperates with the Associated Charities, Cottage Hospital dispensary, School Department and Psychological Research Bureau. During the year 10,683 visits were made by the staff.

San Francisco

BABY HYGIENE COMMITTEE, SAN FRANCISCO BAY BRANCH OF THE AMERICAN ASSOCIATION OF UNIVERSITY WOMEN

Organized, 1909.

Aim: The maintenance of a Children's Health Center for the instruction of Mothers in the feeding and hygiene of infants and children of pre-school age; maintenance of a clinic and feeding conference for foster babies of Associated Charities; training of doctors and lay workers in the conduct of Health Centers.

Board: The governing board consists of 25 women.

Territory: The Committee serves an urban territory with a population of 600,000.

Staff: Doctors: 1 director, 9 volunteers, a visiting nurse and social service worker. Nutritionists: 7 volunteers. Other volunteer workers: 15.

Type of work: A Health Center is maintained for infants, pre-school and dependent children. Home visiting and educational work is carried on, and clinics are held for dependent children.

Financial: The Committee is supported by the Community Chest.

General Statement: Since the organization of the first Child Health Center in 1909 until the present time, the Baby Hygiene Committee has steadily widened its scope. It established the idea of taking care of the well child, of weekly health conferences and food instruction. As an educational piece of work, it taught the mother to intelligently care for her child under scientific instruction. Two days each week are given over to the infant, one day to the dependent child of the Associated Charities in foster homes and one day to the run-about child. A dental hygienist is in weekly attendance and teaches the care of the mouth, the importance of the first teeth and the use of the tooth brush. Visiting nurse attends all conferences and assists the mother to carry out doctor's instructions in the home. Children between the ages of 18 months and two years are advanced to the run-about class. A graduation party is held at which each child is presented with a health diploma containing its health history. Talks on the health of the run-about child are given to the mothers by the doctors in charge.

Last year there was an attendance of 2,674 children.

For six months a weekly lecture was given on prenatal care. This also included a complete demonstration for the care, clothes and nursery equipment. Two newspapers published 16 lectures written by our physicians on mother and infant welfare. Special questions were answered through the columns and by letter and the California State Board of Health published these same talks in its weekly bulletin. The Baby Hygiene Committee cooperates with the San Francisco Board of Health in its welfare work and with the Associated Charities in presenting Educational lectures. The Committee also looks up all birth registrations.

CALIFORNIA DAIRY COUNCIL

Organized January, 1919.

Aim: To arouse the people to a realization of the necessity for a liberal use of milk products in the diet of children, to enlighten the public concerning the value of dairy products in maintaining the bodily and mental vigor of adults; to aid in increasing production, and raising standards of quality; to improve methods of manufacture and distribution, and to stabilize prices.

Board: The Council is governed by a board of 45 directors.

Territory: The organization is state-wide in its scope and as such serves about two million people.

Staff: A secretary-manager, 3 nutrition workers, 6 clerical assistants.

Financial: The Council is supported by membership dues.

Type of work: The activities of the California Dairy Council fall naturally into the following divisions: educational work on the nutritional value of dairy products as human food; dairy improvement work; educational work on the importance of the dairy industry to the economic welfare of the state; and legislative work in the protection and encouragement of the dairy industry.

General Statement: A large number of meetings were held in all parts of the state, with groups of school teachers, parents, school officials, school nurses, club women, welfare workers, business men, dairymen, and bankers.

A great deal of work has been performed in the organization of Milk Service in the schools. When the Council was organized, scarcely any milk was served in any city in the state. Today there is scarcely a city of any size that has not a regularly organized Milk Service in every school.

The Council has cooperated with Parent-Teacher Associations in Baby-Welfare Work in San Diego and Los Angeles Counties, and has done a large amount of pre-school work throughout the state; the Council has conducted "Dairy Products for Health" Campaigns in Riverside, San Diego, and Fresno, and participated in a number of special campaigns in various parts of the state.

During 1922 100,704 pieces of literature, 3,324 charts and posters and 116 books were distributed.

SAN FRANCISCO TUBERCULOSIS ASSOCIATION

Organized April 20th, 1906.

Aim: An organization dedicated by private endeavor as a laboratory where methods for fighting tuberculosis may be initiated and demonstrated and their administration ultimately turned over to the proper public authority.

Board: The governing board consists of 13 men and 4 women.

Territory: The Association serves the City and County with a population of 506,000.

Staff: General secretary, director medical service, director nursing service, director social service, director of nutritional service. Nutritionists: 4 full time; 41 part-time, one clerical assistant.

Type of work: Home visiting, clinics, classes, hospital and research.

Financial: This Association is supported by funds from the community chest, with a budget of \$37,500.

General statement: The Association cooperates with the Council of Social and Health agencies, the Board of Education, and Board of Health. During the past year, the main emphasis of the Association's work has been placed upon the nutrition program in the public schools. The nutrition and health teaching program was begun in 1921 with the establishment of two open air schools for children who had been exposed to tuberculosis or who were habitually undernourished. Following this experiment a health survey of 44,500 pupils in the San Francisco schools was made. This survey was followed by the establishment of bread and milk lunches in all the schools of the city. Twenty nutrition classes for underweight children were begun and continued during the year. These classes have been extended to sixteen other schools by a subsidy paid to selected teachers.

CANADA

PROVINCE OF ALBERTA

Edmonton

DEPARTMENT OF PUBLIC HEALTH AND PUBLIC HEALTH NURSING BRANCH

Organized 1918.

Territory: The work of the Department covers the whole Province of Alberta.

Staff: The Minister of Health, deputy minister, superintendent, supervisor, 12 field nurses, rural public health nurse, child welfare nurse, lecturing nurses and district nurses and one clerical assistant. Six doctors give free service for child welfare clinics.

Type of work: Generalized public health nursing, inspection of rural schools, home visits, child welfare and maternity conferences, tuberculosis follow-up and social service, district nursing. Child and maternity conferences cover the prenatal period until the end of the pre-school period. Nine weekly conferences are held. Conferences in the principal cities are held with the cooperation of the cities.

Financial: The Department is supported by the Government. Total budget \$39,000. The prenatal and child welfare conferences are free to the public.

General statement: The Public Health Nurse under the Provincial Department of Health conducts health inspection of rural school children, but no medical officers have been employed to date.

An individual record system is kept, but as the school work in the cities is under the municipal authorities, our records are not continuous.

There is cooperation between the University of Alberta, City Departments of Health; Medical Schools; Relief Organizations and Private Groups.

There has been a decrease in infant and maternal mortality, and in deaths from tuberculosis, improved health among children, less communicable disease. The interest of parents is manifested by increased attendance at clinics.

PROVINCE OF BRITISH COLUMBIA

Victoria

PUBLIC HEALTH NURSING SERVICE

Type of work: The Public Health Nursing Service is directed from the health centers in municipalities and rural districts. Well-baby clinics, Little Mothers' League classes and medical clinics are conducted and lectures on home nursing and hygiene given. The nurses also make classroom inspection of schools.

Staff: The School Act has been amended to allow Boards of Trustees to employ public health nurses and dentists. The nurses are employed by municipalities, or several rural school districts may combine to raise the amount of the nurse's salary.

The nurses are trained in public health nursing. The University conducts a five year course leading to the degree of Bachelor of Science and Nursing. The first three are the usual nurses training courses leading to certificate of registered nurse; the next two in public health nursing which entitles the nurse to the degree of Bachelor of Science and Nursing.

Finances: Public health nursing work is financed through taxation.

General statement: The Child Welfare Committees in British Columbia work through the Women's Institutes. A Provincial Secretary deals with the work and each Institute has a committee known as the Child Welfare Committee as one of its active units. Yearly conferences are held at which the work for the past year is

reviewed and a program for the following year outlined. These committees work in conjunction with and under the direction of the Provincial Board of Health.

The work has been carried on for three years and is now on a sound basis. The difficulty is not to find places for the nurses, but to find nurses to fill vacancies in communities where they are clamoring for such service.

PROVINCE OF NEW BRUNSWICK

Fredericton

CHILD WELFARE DIVISION OF THE DEPARTMENT OF HEALTH

Organized October, 1918.

Aim: The purpose of the organization is child welfare.

Board: The organization is under the management of the Department of Health.

Territory: The work of the organization covers the entire province, which has a population of 388,000.

Staff: The regular staff of the Department of Health carries on all child welfare work.

Type of work: Home visiting, clinics and classes are provided for infants and pre-school children. Hospital care is given to obstetrical patients, infants and pre-school children. Health Centers and mobile units are maintained.

General statement: The cooperating agencies are: The Provincial Red Cross, Victorian Order of Nurses, Anti-Tuberculosis Society, Women's Institutes, Imperial Order Daughters of the Empire, Junior Red Cross, and St. John's Ambulance Society.

ONTARIO

Hamilton

THE BABIES' DISPENSARY GUILD

Organized 1911.

Aim: The charter of the guild provides for any effort to reduce infant mortality or advance child welfare.

Board: The guild is governed by a board of directors, with an auxiliary medical board, also a women's board, controlling material relief and supplying voluntary aid for practical work.

Territory: The guild serves an urban territory with a population of approximately 110,000.

Staff: Supervisor of the guild. Field workers: 5. Medical director. Doctors: 13 part time, each of whom give from 1 to 2 hours per conference, 9 alternates to fill vacancies. Volunteer workers: 6 in active service and 6 alternates, giving from 2 to 3 hours per conference. Clerical assistant: 1.

Type of work: The work includes weekly prenatal clinics and follow-up visits for supervision and instruction in general care. Child Welfare: Weekly conferences for children up to two years of age in five depots, semi-weekly in one depot and a central station with a daily conference.

Financial: The total budget was \$14,786.66. The organization is supported by membership fees and an appropriation from the city. No fees are charged for services.

General statement: The outstanding achievement for the year has been the establishment of a prenatal clinic, reaching 75 per cent of free ward hospital patients. A "refresher" course in pediatrics was given to physicians.

Toronto

DEPARTMENT OF PUBLIC HEALTH, CHILD HYGIENE SECTION

Organized 1912.

Aim: To conduct hygiene and preventive work—all types.

Board: The governing board consists of 4 men and 1 woman.

Territory: The work of the organization covers an urban population of 540,000.

Staff: The executive staff of the Department consists of a medical officer of health, a deputy medical officer of health, with directors for each of the various sections. The medical staff consists of nine full time physicians and four part time physicians. The nursing staff includes a director, 114 nurses and 18 clerks. The dental staff consists of a director, 31 part time dentists, and 28 dental assistants. A volunteer organization has approximately 70 members.

Type of work: The staff named above does generalized public health work. A large proportion of their time is devoted to child hygiene, including prenatal, infant, pre-school, and school work.

Financial: The organization is supported by a city appropriation. No fees are charged.

General statement: Infant mortality rate for the year 1922 was 75.1. Corrected for 15 per cent incomplete registration of births 63.9.

QUEBEC

Montreal

CHILD WELFARE ASSOCIATION OF MONTREAL

Organized 1917.

Aim: To promote the knowledge of child hygiene in all its phases. To encourage methods and measures to reduce maternal and infant sickness and mortality. To promote or support measures conducive to the health, happiness, and welfare of children.

Board: The governing board consists of thirty-six members, elected annually.

Territory: The Association serves an urban territory with population of approximately 300,000.

Staff: The staff consists of a director, a part-time medical director, and a nursing supervisor, 16 doctors part time, 15 nurses, and office assistant.

Type of work: Eleven health centers with conferences for infants under two years, conferences for prenatal cases. Work in centers is educational and preventive only. All sickness other than feeding disturbances referred to private doctors or to dispensaries. Educational visiting in homes.

(b) Nutrition classes in selected school.

(c) Summer day-camp for children with an attendance during the summer of 21,000.

(d) Health letters sent to expectant mothers throughout the Province.

(e) Health Week for educational propaganda in the city.

(f) Weekly educational article in press.

Financial: Budget for 1923 was \$37,800. The Association is supported chiefly by voluntary contributions, through a financial federation of charitable agencies. It receives also a small grant from the Province and from the City of Montreal.

General statement: During the past year the work has increased by 50 per cent, there being now nearly 3,000 babies under supervision. A fourth prenatal conference has been established, and a special nurse appointed for the prenatal work.

The demonstration of nutrition classes in three English and three French schools has led to the establishment of a milk lunch in many schools, and to a recognition of the value of special nutrition work.

The work of all the centers has been standardized and the direction of it centralized. During the coming year it is planned to establish conferences for pre-school age children at four of the centers.

CHINA

Shanghai

COUNCIL ON HEALTH EDUCATION

Organized: The Council is the outgrowth of the combined health efforts of the Young Men's Christian Association, the China Medical Missionary Association, and the National Medical Association which was organized in 1917 under the name of the Joint Council on Public Health Education. In 1920 when the Young Women's Christian Association and the China Christian Educational Association joined, the name was changed to the Council on Health Education.

Aim: To conserve and promote health in China primarily through the constituencies of the participating organizations.

Board: The affairs of the Council are administered by an Executive Committee composed of representatives of the participating organizations.

Territory: The work of the Council is national in scope.

Staff: The staff is composed of 17 full time and 8 part-time workers.

Type of work: Preparation of books, pamphlets, bulletins, charts, exhibits on health subjects; establishing a loan library of books and pamphlets on health subjects; health campaigns in various cities, distribution of films and lantern slides; having anatomical models made for use in schools; weekly health articles in 53 newspapers in 16 provinces.

Financial: The Council is supported by contributions from individuals and organizations.

General statement: The Council has served 907 medical, educational and evangelical missionaries, 879 officials of government schools and city health departments and provincial governors, 56 Chinese districts educational societies and famine relief societies.

COLORADO

Denver

COLORADO CHILD WELFARE BUREAU

Organized 1919.

Aim: To secure a wiser and better trained parenthood and to cultivate such a healthy and happy childhood as shall insure the development of an ideal citizenship for the state.

Board: The governing board consists of two men and three women.

Territory: The work of the Bureau covers an urban territory with a population of 256,369 and a rural territory with a population of 550,000.

Staff: Executive secretary, consulting surgeon, organizer, 2 pediatricians, supervisor of nurses, 1 part-time and 2 part-time maternity and infancy nurses, 1 maternity, and infancy social worker, 1 office secretary and 1 clerk.

Type of work: The Bureau acts through all organizations for better parenthood; places children where they may receive proper care physically and mentally; promotion of the welfare and hygiene of maternity and infancy, cooperation with the Federal Children's Bureau, Department of Labor, Washington, D. C.

Financial: The total budget for the year is \$4,000 for child welfare and the budget for the state under the Sheppard-Towner Act is \$15,000 annually, making a total budget for the Bureau of \$19,000 annually.

THE DENVER TUBERCULOSIS SOCIETY

Organized October, 1917.

Aim: To control and prevent the spread of tuberculosis.

Board: The governing board consists of 22 men and 14 women.

Territory: The work of the society covers an urban territory with a population of 256,369.

Staff: An executive secretary, 3 nutrition workers, 13 physicians part-time, 1 case worker for the tuberculous at the City Charities, 1 housing worker, 1 clerical assistant, 1 matron at open air school.

Type of work: The work: nutrition classes are held in public and parochial schools, in orphanages and dispensaries. General health education is emphasized and assistance given teachers along this line. A physician attends each nutrition class. The physicians are organized in a committee of medical directors of nutrition classes and meet monthly in conferences with the supervisor of nutrition work and the executive secretary. Sixteen classes were held in the spring of 1923 and an average gain of 295 per cent or nearly three times the normal rate of gain was obtained.

The orphanages and other institutions in the Chest are given advice along dietary lines.

The housing worker visits and investigates the boarding houses for the tuberculous in Denver, and places patients in sanatoria and boarding houses.

Financial: The budget for the year was approximately \$28,000. The Society is supported by the community chest and the sale of Christmas Seals.

VISITING NURSE ASSOCIATION

Organized 1904.

Aim: General public health program.

Board: The governing board consists of 30 women.

Territory: The Association serves the city and county with a population of 290,000.

Staff: The staff consists of a superintendent, medical director and infant welfare doctors who serve part-time, 2 supervising and 23 staff nurses and 4 clerical assistants.

Type of work: Home nursing care for all ages, infant welfare stations, maternity clinics, and day nursery inspection.

Financial: The Association is supported by the community chest, private donations, subscriptions, and memberships.

General statement: The Association cooperates with the City Charities, Social Service Bureau, Denver Tuberculosis Association, Colorado Tuberculosis Association and all other agencies of the city. The nurses made 38,908 visits and cared for 6,404 patients during the past year.

CONNECTICUT

Bridgeport

CITY DEPARTMENT OF HEALTH, BUREAU OF CHILD HYGIENE

Aim: To protect and safeguard the health of the children of the city.

Territory: Scope of work city wide, with a population of 155,000.

Staff: Doctors: 2. Nurses: 2 directors, 2 special supervising, 20 staff. Dentists: 1. Clerical assistants: 1.

Type of work: Home visiting for prenatal, postnatal, infancy, pre-school and school age groups. Health centers are maintained for infants and pre-school children. The work is preventive and educational.

The Division of Dental Hygiene during the past year has limited its work to pre-school children and to children attending the parochial schools. Children are given prophylactic treatments and referred to their own dentists or to the Health Department's dental clinic.

Financial: The Bureau is supported by an appropriation from the city. Total budget, \$45,000.

DEPARTMENT OF PUBLIC CHARITIES

Organized 1836.

Aim: Organized for the purpose of caring for the poor of the city.

Board: The governing board consists of 3 men and 1 woman.

Territory: The work of the department covers an urban territory with a population of 148,152.

Staff: A supervisor of the department. Nurses: 3 district, 10 institutional. Social workers: 8. Clerical assistants: 15.

Type of work: The work includes: Care of sick; care of dependent children; care of dependent families; supervision of tuberculosis prenatal cases attending clinic.

Financial: The total budget for the year was \$278,889. The department is supported by public funds.

Hartford

BUREAU OF CHILD HYGIENE, STATE DEPARTMENT OF HEALTH

Territory: The State of Connecticut.

Staff: The staff consists of director, assistant director (doctors); secretary; supervisor of field workers, 2 field workers, (public health nurses); instructor of midwives, (B. N. and licensed midwife); 1 clerk.

Type of work: Surveys of towns preparatory to beginning work to ascertain the numbers and causes of infant and maternal deaths. The prompt issuing of birth certificates and prosecution for neglect of same. Supervision of midwives.

To assist the State Department of Health in checking spread of contagious diseases, by the talks given to the mothers by the nurses in their follow-up work, and at the well baby conferences; through movies or lantern slides, and through the distribution of the pamphlets that are published by the Department.

Financial: The Bureau is financed by the State.

General statement: The well baby conferences are opened after the Bureau has been assured of the hearty support and cooperation of the local health officer and the physicians. Exhibitions of miniature rooms showing the well baby conference, models of the sick room, the clean room, and the dirty room, talks and moving pictures are given and posters announcing the day and place of the first conference to be held, are put up in conspicuous places. Another feature of the work of the conferences, is the follow-up work done by the nurse in the case of an unusual child. The environment is studied and an effort made to have the child report every month at the conference. Where the cause of arrested development is not discovered and the condition controlled, the case is referred to the mental hygienist of the department for special study.

The prenatal work thus far has been purely educational. Cooperation is first secured from the local health officers and the physicians of the community, then the interest of the clergy and presidents of every woman's organization and girl's organization is secured. An initial meeting of the women of the local committee is called and a representative committee is chosen. A course consisting of a series of 9 lectures, demonstrations, and moving pictures is given. Special stress is placed upon the importance of the nutrition of the expectant mother and the young child. This work is carried on principally in the rural districts where there is no Visiting Nurse Association and the nearest physician is located at a great distance.

CITY OF HARTFORD CHILDREN'S HEALTH STATIONS

Organized in 1905.

Aim: To reduce infant mortality and to improve the health of children.

Board: Joint Committee composed of 3 members of the Board of Directors of the Visiting Nurse Association and 3 members of the Board of Health Commissioners of the City of Hartford.

Territory: The stations serve an urban territory with a population of approximately 152,000.

Staff: The medical staff is under the direction of the Health Officer and two Board of Health physicians and the nursing service under the direction of the Visiting Nurse Association. The staff consists of 5 physicians, 1 supervising nurse, 10 staff nurses, 1 nutrition worker, 2 clerical assistants and a group of volunteer aids.

Type of work: Health conferences for infants and children of pre-school age, educational health work in the homes of infants and children registered at the stations, and with expectant mothers, and to some extent with the mothers of all babies whose births are registered, in an effort to get every child under regular health supervision.

Financial: The work is entirely supported by the city, the equipment of the stations having been turned over to the city without charge.

General statement: On April 1, 1923, the entire work of the Babies' Hospital Health Stations was transferred to the Board of Health Commissioners of the City of Hartford, which has employed the Visiting Nurse Association to carry on the work.

New Haven

ALUMNAE ASSOCIATION OF THE CONNECTICUT TRAINING SCHOOL FOR NURSES, INC.

Organized January 6th, 1891.

Aim: To make of the association an active participant in the welfare of the community.

Board: President, vice president, second vice president, secretary, treasurer, and six directors.

Financial: The Association is supported by membership dues and fees.

General statement: The Association has been reorganized during 1923 and a constitution conforming to the National has been adopted.

CONNECTICUT CHILDREN'S AID SOCIETY, NEW HAVEN BRANCH

Organized 1918.

Aim: To care for dependent children.

Board: The governing board consists of 7 men and 14 women.

Territory: The work of the Society covers both urban and rural territory.

Staff: Field workers: 3. Clerical assistant, 1.

Type of work: The placing and supervision of children in carefully selected foster homes.

Financial: The total budget for the year was \$18,000. The Society is supported by private contributions.

General statement: The Society is a non-sectarian organization, offering advice and assistance in any case involving child care.

CRIPPLED CHILDREN'S AID SOCIETY, INC.

Organized January 14, 1914. Incorporated December 21, 1914.

Aim: For the relief of crippled children by affording them material assistance in providing medical and surgical care, in supplying orthopedic appliances and in providing such means of hygienic and social betterment as may tend to remove the handicap to the children's welfare and happiness which their unfortunate situation has imposed.

Board: The Society is governed by a board of 13 men, as trustees, and an executive board of 17 women.

Territory: The work of the Society is carried on in New Haven and outlying districts.

Staff: There are no paid executives, the services of the managing board being voluntary. The medical board consists of three doctors, one of whom is in charge and doing active work. The physician who is supervisor of medical service, whose services are voluntary, gives about seven hours weekly to the care of these children. A registered nurse is in charge of the nursing service with one paid assistant, and a paid office assistant on part time.

Type of work: The work includes orthopedic clinics (weekly), social service, hospital and home nursing, advisory care and corrective exercise classes.

Financial: The total budget for the year was \$15,000. The Society is supported by the community chest and membership dues. The care of the children is free, except where the parents can contribute a small payment to the Society.

General statement: The most interesting results during the past year were the closing of 37 cases as cured and the accomplishment of ten times more work than was done eight years ago. Operations were performed and proper orthopedic appliances supplied by the Society to help children attend school regularly. Special arrangements have been made with the New Haven Orphan Asylum by means of which ten of our children are cared for by the Society in one of the Asylum cottages.

NEW HAVEN VISITING NURSE ASSOCIATION

Organized 1905.

Aim: To care for the sick in their homes, to teach the family to care for the patient, to teach health habits and home hygiene.

Board: The governing board consists of 36 women, with an advisory board of 7 men.

Territory: The Association serves a city population of 172,000, and a suburban community of 15,000.

Staff: The staff consists of a superintendent, an associate superintendent, 6 supervisors, and 43 field nurses. Home Economics Department: 1 supervisor, 1 assistant supervisor, and 6 field workers, registrar, and 5 clerical assistants. Volunteer workers, 2.

Type of work: Home nursing, with preventive and educational work.

Financial: The Association is supported by collections from patients and from the Metropolitan Life Insurance Company for its policy holders, special contributions, an appropriation from the city, and the community chest. A fee of 85c per visit is collected if the patient can pay. The total budget for the year was \$109,811.

General statement: The report is for the whole organization as the Child Welfare Department has been absorbed into the generalized program. Although each nurse is directly responsible for the care of the children in her own district, the child welfare work is still under the direct supervision of a specialized child welfare nurse. During the year, 4,216 children were taken under care, 703 of these being less than one month old. The greater number of these children will be kept under care until they reach school age. The Association conducts one prenatal conference, 16 well-baby conferences, and 10 conferences for the pre-school child, in this way helping to protect the child life of the city. There is a doctor in attendance at the conferences, the Association paying the doctor three dollars for each conference attended.

WEST END CLUB

Organized March, 1921.

Aim: To promote an interest in child welfare and to cultivate high ideals in the home.

Board: The governing board consists of 12 women.

Territory: The Club serves an urban population of 8,000.

Type of work: Welfare work through schools and Visiting Nurse Association.

Financial: The budget for the year amounted to \$250 and is supported by dues, entertainments, sales, etc.

General statement: The West End Club is an organization of about 160 women living at the western end of New Haven in the district formerly called Westville. The meetings consist of a program, usually a speaker from New Haven and a social hour.

YALE PSYCHO-CLINIC

Organized 1911.

Aim: To develop the diagnostic, advisory, and research phases of the work of the clinic.

Board: The clinic is a part of Yale University Polyclinic at the New Haven Dispensary.

Territory: The services of the clinic are not restricted to New Haven, but are available to any persons or agencies in the state.

Staff: The director of the clinic is also professor of child hygiene in the Graduate School; there are two clinical and research assistants.

Type of work: The activities of the clinic include

1. Diagnostic and consultation service.
2. Field work.
3. Research.

Financial: The clinic is supported by the University.

General statement: The diagnostic and consultation work of the clinic is conducted at the New Haven Dispensary and psycho-clinical laboratory. Over twenty local and state agencies refer children for mental diagnosis and advice as to treatment and social disposition. With few exceptions the cases referred are problem cases, involving dependency, defect, delinquency, or some form of educational adjustment. The State Bureau of Child Welfare refers adoption, placement and county home commitment cases. Records of all examinations are kept on file. Recommendations are ordinarily made through conference followed by report or letter.

An increasing proportion of clinical cases are infants and young children. Fully one third of the clinical cases seen during the year 1922-23 were six years of age and less.

The systematic research of the clinic deals with the mental development and mental hygiene of children of pre-school age. For several years a program of investigation has been in progress to determine clinical criteria of development and to delineate norms of behavior in pre-school children. The preliminary phase of this work has been completed. Some 500 unselected normal children have been studied; 50 at each of the following age levels: 4, 6, 12, 18, 24, 36, 48, and 60 months. The results have been assembled into a schedule of normative items, and a diagnostic guide for the use of mental examiners and pediatricians is being prepared.

Norwich

CONNECTICUT ORGANIZATION FOR PUBLIC HEALTH NURSING

Organized in 1906.

Aim: To stimulate interest in the establishment and extension of public health nursing in the state, and to bring women engaged in the work into closer relationship with one another.

Board: The Organization is governed by a board of 9 women.

General statement: The membership consists of public health nurses, who are registered nurses, engaged in public health nursing, and the boards of directors of Visiting Nurse Associations. Three times a year round tables are held, with speakers on public health nursing and allied subjects. The Organization has worked in closest cooperation with the Bureau of Public Health Nursing, Connecticut State Department of Health.

Waterbury**WATERBURY VISITING NURSE ASSOCIATION**

Organized 1903.

Aim: To care for the sick and to teach hygiene and child care by actual demonstration in the home.

Board: The governing board is formed of a Board of Directors comprising 11 men and an Executive Committee, comprising two men and six women.

Territory: The Association serves an urban territory with a population of approximately 91,516.

Staff: Superintendent, 11 part time doctors, a supervisor of child welfare and prenatal work, and 11 staff nurses.

Type of work: Prenatal work is done through home visiting and weekly clinic. Postnatal, bedside care and instruction are given to patients who have been attended by a physician. Infants are kept under supervision through home visiting until they are two years old. Infant welfare conferences are held in six sections of the city each week. Six "Little Mothers' League" classes covering a course of 12 lessons are conducted. Educational window exhibits are prepared every six weeks or two months at two of the baby welfare stations by the student nurses from the Waterbury Hospital, who come to the Association for experience. Cases of communicable disease and of tuberculosis are given bedside care when necessary.

Financial: The budget for the year was \$26,000. The Association is supported by an endowment fund, by fees, and by special contributions.

General statement: A new baby welfare station was opened at the Waterbury Girls' Club building and is to be continued in the same building which has now become the American Legion Club house. Instead of a pre-school conference weekly at one station, it is planned to hold one conference a month at each of the three stations. The vacation house entertained 200 mothers and children from July 5th to August 31st.

CZECHOSLOVAKIA**Prague****CZECHOSLOVAK RED CROSS**

Organized February, 1919.

Aim: Activity in the domain of social hygiene, charity and relief work in case of war. Education of the youth through the "Junior Red Cross."

Board: The governing board consists of 10 men and 1 woman.

Territory: The entire country with a population of over 13,000,000.

Staff: The staff consists of a director general; doctors: 1 director, 11 full time, 32 part-time, 100 part-time volunteer; nurses: 1 director, 11 supervising, 33 staff, 1,900 registered nurses; social workers: 50 full-time, 2,305 part-time volunteers.

Type of work: Home visiting, clinics, and health centers are maintained for all ages. Mothers and children are examined at the health stations and the mothers are instructed in hygiene, children from the famine areas of Russia, transported into Czechoslovakia by the Red Cross and children of Russian refugees were clothed and fed. They were given a health examination and placed in orphanages, families, and vacation colonies, the Red Cross maintaining supervision of their health. A hospital conducted by the Red Cross at Hust is the center of the fight against epidemics. Health consultations for mothers and children and a tuberculosis dispensary are also maintained at the hospital. Vacation camps are conducted for children suspected of having tuberculosis living in an unhygienic environment.

Hygiene is popularized by means of a mobile unit traveling through the districts organizing conferences on tuberculosis, general hygiene, and the care of children. The group is composed of two doctors, an agent, and a chauffeur who is also a cinema operator.

Financial: The budget for the year amounted to 22,435,050 Czechoslovak Crowns.

General statement: During 1921 and 1922 there were 53,995 cases examined and given necessary instruction at the health stations. A hospital founded for the children of Slovakia by the League of Red Cross Societies was operated by the Czechoslovakia League for one year caring for 430 children in the hospital and 1,443 in the ambulances. Four hundred refugee children and 439 Russian children from famine areas received care; 1,889 children were cared for in 36 sanitary and preventive colonies. The Czechoslovakian League cooperates with the State Departments and all health, charitable and social agencies.

The Czechoslovak Red Cross organizes every year at the Easter holidays, the "Peace days of the Red Cross," during which all daily papers avoid political topics and devote their interest to questions of social hygiene. A "parliament of social workers" is being planned for the coming year.

DELAWARE

Wilmington

CHILD WELFARE DEPARTMENT, STATE HEALTH AND WELFARE COMMISSION

Organized 1918, as a part of State Council of Defense. Organized in 1921 as the Child Welfare Commission. Reorganized in 1923 as the State Health and Welfare Commission.

Aim: To take over and further develop the child welfare activities conducted by the Child Welfare Commission of the State of Delaware; to cooperate with state, county, and local official bodies in the development of such child welfare work as the Commission may believe will materially advance the interests of the children of the state; to make a study of the needs of children a definite part of its work, and to make recommendations for executive and legislative action in matters relating to children.

Board: The governing board consists of four physicians and three women.

Territory: The work of the Commission covers both urban and rural territory, with a total population of 244,000.

Staff: Doctors: 1 executive secretary, 9 doctors part time. Nurses: 1 supervisor, 9 staff nurses. Clerical assistants: 4. Members of the Catholic Daughters of America and the Junior League are volunteer workers.

Type of work: The Commission has to do with all matters pertaining to child welfare with the possible exception of the Juvenile Court. Home visiting, clinics, classes, and health centers are maintained.

Financial: The budget for the year is \$25,000. The Commission is supported by an appropriation from the state. It also administers the Federal Sheppard-Towner Funds.

General statement: In the city regular visits to the center are required. They vary from two weeks to one month for each case, though special cases are required to come more frequently. In rural work this scheme is not possible. The frequency with which the nurse visits these families is dependent on the weather and the roads. All nurses, whether rural or urban, must put in at least one-third of their time on prenatal, infancy and pre-school child work, with the emphasis on the prenatal and infancy groups. The visits of the nurses are instructive and educational. Home care is given only in emergency. Cases needing special care are referred to the hospitals.

DISTRICT OF COLUMBIA

Washington

CHILD WELFARE SOCIETY

Organized 1901—incorporated 1914.

Aim: Conservation of child life through the education of parents.

Board: The governing board consists of 1 man and 41 women.

Territory: The Society serves an urban territory with a population of 437,571.

Staff: Doctors: 1 medical director, half time, 15 part time. Nurses: 1 supervisor, 9 staff. Dentists: 1 supervisor, 18 part time.

Type of work: The Society establishes and conducts centers where prenatal instruction is given by physicians and nurses, and mothers are taught how to care for the well baby and child; it instructs mothers in modification of milk, feeding, bathing, and home sanitation; when necessary it secures homes for babies and children, wet nurses and part time work for mothers.

Financial: The Society is supported by the Federal Government, private subscriptions and entertainments. The total budget for the year July 1, 1922 to June 30th, 1923, was \$29,832.33.

General statement: The statistical report shows that 5,564 individuals have received health supervision during the year; and that 21,436 home visits have been made by the nursing staff. This report is for the fiscal year ending June 30, 1923. Since that time, the greater part of the work has been taken over by the Child Hygiene Service, Health Department of the District of Columbia. The work is carried on along the same lines and the two organizations work in close cooperation; the same workers being on the staff of both organizations.

NATIONAL CONGRESS OF MOTHERS AND PARENT-TEACHER ASSOCIATIONS

Organized February 17, 1897.

Aim: Child welfare in home, school, church and community.

Board: The governing board consists of 2 men and 87 women.

Territory: The work of the Association is national in scope covering both urban and rural communities.

Staff: Executive secretary, office and field secretaries and volunteer workers.

Type of work: Organization of Parent-Teacher Associations, establishment of kindergartens and the distribution of literature which is of practical use to parents.

Financial: The organization is supported by membership dues, contributions, pageants and other community entertainments by members.

PROVIDENCE HOSPITAL DAY NURSERY

Organized 1908.

Aim: To assist working women, badly cared for and ill fed children.

Board: The governing board consists of 5 sisters of the hospital.

Territory: The children of the nursery come mainly from the southeast section of Washington.

Staff: The Sisters of Charity of Providence Hospital are in charge; field workers and nurses of the Hospital Training School and Ladies of Charity.

Type of work: Health and nutrition classes are conducted at the Day Nursery. Home visits are made by the staff and Ladies of Charity. Kindergarten is conducted for the children of pre-school age every day. Craft work, basketry, and weaving, is taught the larger girls after school. Sewing school is held by the sister in charge and Ladies of Charity, for girls every Saturday afternoon. The Girl Scout meetings are held weekly. During the summer 2 weeks outings are given the children in turn at the hospital farm. Dinner is served to the children of the Parochial School.

Financial: The nursery is supported by a small endowment, the Ladies of Charity, fees, entertainments, and donations.

FLORIDA

Jacksonville

BUREAU OF CHILD WELFARE, STATE BOARD OF HEALTH

Organized in 1915.

Aim: Conservation of maternal and child life.

Board: The governing board consists of 3 men.

Territory: The work of the Bureau is state-wide and serves a population of approximately 800,000.

Staff consists of a director, 4 staff nurses, 1 full-time and one half-time clerical assistant.

Type of work: Home visiting for maternal, prenatal, obstetrical, and postnatal cases, infancy, pre-school and school age groups; clinics for infants and pre-school children; classes on maternal, prenatal, obstetrical, infant and pre-school care.

Financial: The Bureau is supported by Federal and state appropriations with a budget of \$27,031.72.

General statement: The Bureau has cooperated with the United States Public Health Service units and with the Children's Bureau of the United States Department of Labor in the promotion of the welfare and hygiene of maternity and infancy as outlined in the Sheppard-Towner Act.

GEORGIA

Augusta

CHILDREN'S HOSPITAL ASSOCIATION

Organized in 1900.

Aim: To provide free hospital care for white children of Richmond County and private care for women and children.

Board: The governing board consists of 12 men and 17 women.

Territory: The Association covers an urban territory with a population of 53,000 and a rural territory with a population of 12,000.

Staff: The staff consists of a superintendent, a director of medical service and one full-time doctor, one full-time and one part-time volunteer worker.

Type of work: A general hospital for children and women. The hospital cooperates with the Augusta Clinic, City Dispensary, and Public Health Nursing Service.

Financial: The hospital is supported by appropriations from city and county, dues, contributions, small income from endowment, and fees from private patients. Expenses about \$20,000.

HAWAIIAN ISLANDS

Honolulu

PALAMA SETTLEMENT

DISTRICT NURSING DEPARTMENT

Organized 1905.

Aim: To educate mothers, fathers, and children in the proper care of themselves and their children, and to give nursing care to all who need it.

Board: The governing board consists of 16 men.

Territory: The work of the Association covers the city with a population of 95,000.

Staff consists of a head worker, 1 doctor part time, 9 doctors (volunteer service) part time, 1 supervising nurse, 11 staff nurses, 1 clerical assistant, and 6 volunteer workers.

Home visiting for maternal, prenatal, obstetrical, and postnatal cases, infants and children; clinics and classes for maternal and prenatal cases, and clinics for infants and children. A day camp was conducted for undernourished children 10 weeks in the summer.

The department is supported by private donations and United Welfare Campaign. Total budget \$66,800.

General statement: The settlement cooperates with the Social Service Bureau, Humane Society, and the Juvenile Court. Beginning January, 1923, six baby health clinics (age limited to 2 years) were established and have done prenatal and maternity work. Plans are being made to establish prenatal clinics and maternity service in 1924. The work has grown 240 per cent during the past year. In addition to the district nursing work, one general dispensary clinic is held each morning.

ILLINOIS

Chicago

AMERICAN DENTAL ASSOCIATION

Organized 1859.

Aim: To cultivate and promote the art and science of dentistry, and of its collateral branches; to conduct, direct, encourage, support or provide for exhaustive dental and oral research; to elevate and sustain the professional character and education of dentists; to promote among them mutual improvement, social intercourse, and good will; to disseminate knowledge of dentistry and dental discoveries; to enlighten and direct public opinion in relation to oral hygiene, dental prophylaxis, and advanced scientific dental service, and in relation to the advantages and progress of enacting and enforcing proper, just, and uniform dental laws in the several states; and collectively, to represent, have cognizance of and to safeguard the common interests of the members of the dental profession; with express power to acquire property for the purposes of the corporation by purchase, deed, gift, bequest or otherwise, and to hold and administer the same and to publish dental journals, reports and treatises.

Territory: The Association has 32,000 members located all over the United States.

CHICAGO LYING-IN HOSPITAL AND DISPENSARY

Organized February, 1895.

Aim: To provide medical and nursing care to women at time of confinement, also, to instruct doctors, students, and nurses in the art of obstetrics.

Board: The governing board of the hospital consists of 4 men and 35 women.

Territory: The hospital serves an urban territory with a population of 2,701,705.

Staff: Superintendent of the hospital and a superintendent for each of the branches of the hospital. Doctors: 1 director of obstetrical service, 15 full time, 26 part time. Nurses: 1 superintendent of nurses, 1 director of obstetrical service, 13 supervisors, 7 staff, 53 pupils. Social service: 1 director, 4 full time, 3 part time. Volunteer service: 3.

Type of work: Home visiting, delivery of women in their own homes, clinics and research work are carried on in addition to the regular hospital work.

Financial: The budget for the year was \$296,464.60. The hospital is supported by membership dues and special contributions. Fees are regulated for each patient.

General statement: During the year 9,066 patients visited the clinic; 23,630 home visits were paid by the staff; 1,473 patients were given home care; 6,172 patients received hospital care. The infant mortality rate was 1.85 per cent. The age limit for baby conferences is 18 months.

CHICAGO WOMAN'S CLUB

Organized February, 1876.

Aim: Organized for educational, civic and philanthropic purposes.

Board: The governing board consists of 24 women.

INFANT WELFARE SOCIETY OF CHICAGO

Organized 1910.

Aim: The object of the organization is to keep babies well by advice, by supervision, by encouraging breast feeding, and by instruction of the mothers in the rules of hygiene.

Board: The governing board consists of 17 men and 13 women.

Territory: The Society serves an urban territory.

Staff: Superintendent, 1 medical director and 27 doctors part-time, 4 supervising and 39 staff nurses, 1 supervisor of nutrition service and 6 nutrition workers, 1 extension secretary, and 4 clerical assistants.

Type of work: Conferences, nutrition clinics, and prenatal clinics are conducted. The mother is instructed as to the nursing of her child; when breast feeding is impossible an adequate milk modification is prescribed.

Financial: The budget for the year was \$130,000. The Society is supported by private contributions.

General statement: Infant welfare conferences are held twice a week in the 27 centers, two of which were opened the past year. Nutrition classes are conducted weekly in 13 stations and in 8 stations prenatal clinics are held weekly. During the year three new prenatal clinics have been opened.

ELIZABETH MCCORMICK MEMORIAL FUND

Organized May 20th, 1908.

Aim: To improve the condition of child life in the United States.

Board: The Board of Trustees consists of 6 men and 2 women.

Territory: The organization serves the entire United States.

Staff: Director, assistant director. Physicians: staff 2, part time examining 2, consultants 3. Nutrition Department: full time nutrition workers 6, part time 1, clerk 1. Health Education Department: supervisors 2, assistants 2. Statistical Department: workers 4. Psychologist 1. Technical Consultant 1. Speakers 2. Librarian 1. General 10.

Type of work: The activities of the organization have been concentrated on promoting the health of children. It maintains the National Directory of Open Air Schools, furnishes information on methods, equipment, and construction, with a view to standardizing open air schools throughout the country. The Fund is making experiments and demonstrations in health education and studies on the growth of children. Nutrition classes for undernourished children are maintained and promoted.

Financial: The organization is supported by an endowment. Total budget for the year was \$90,260.

General statement: Members of the staff of the Fund have directed courses of study at normal schools and colleges and state universities, and have assisted local communities in planning and starting health service for children. The Fund cooperates actively with such organizations as the United Charities, Chicago Tuberculosis Institute, Pension Department of the Juvenile Court, and various children's institutions, in planning their health service. Lecturers may be secured through the Speakers' Bureau. The Fund also maintains a Child Welfare Library, is a distribution center for literature on child welfare and kindred subjects, and has a wide choice of exhibit material which it loans free of charge, excepting for the cost of transportation.

MOTHERS' AID OF THE CHICAGO LYING-IN HOSPITAL AND DISPENSARY

Organized 1904.

Aim: To be of all assistance possible to the work of the Chicago Lying-In Hospital and Dispensary.

Board: The governing board consists of 40 women.

Type of work: The organization maintains one or more wards in the Chicago Lying-In Hospital to be known as the "Mothers' Aid Sewing Club Ward"; it provides the institution with mothers' and babies' wearing apparel; lends assistance to poor women in the state of pregnancy, and furthers the charitable and educational purposes of the institution.

Financial: The organization has an income from membership dues, initiations, life memberships and the various funds.

General statement: Two rooms have been endowed in the hospital. One known as the "Ida De See Neuman" ward and the other the "My Mother Fund" room. Mothers' Aid members give their services in times of distress to the hospital, making practically all the supplies used by the Lying-In and Pavilion in all departments, thereby making it possible to keep at work one or more floors which otherwise would have been obliged to close. The Junior Auxiliary sends a great portion of their income to the Dispensary for distribution of milk. These same young women assist at all the baby clinics besides making wearing apparel for the babies.

SCANLON COMMUNITY HEALTH CLUB

Organized June, 1922.

Aim: To educate members of the Club and the community in health and hygiene to make the community safe.

Staff: The club has 58 members, mostly mothers.

Financial: The club is supported by monthly dues.

General statement: The members of the Club familiarize themselves with the location of the dispensaries, clinics, and baby welfare stations and cooperate with the city in its effort to stamp out communicable diseases and prostitution.

Freeport

CHILD WELFARE SOCIETY

Organized February, 1918.

Aim: Child welfare, dealing with the period from prenatal life to school age.

Board: A governing committee of fourteen women.

Territory: The Society serves an urban territory with a population of 22,000.

Staff: The staff consists of one supervising nurse, a visiting nurse, and a part-time visiting housekeeper.

Type of work: Supervising nurse gives prenatal care; makes at least one call upon each baby whose birth is recorded with the city clerk. If necessary, makes further calls, giving mother advice as to care and feeding. Maintains a weighing station and keeps accurate record of weights and measurements. Conducts two kindergarten classes each week (one colored) and supervises work in Mothercraft among the older girls. Assists at the Tri-County Orthopedic Clinic conducted by the state and attends to follow-up work. Conducts a well baby conference twice a month under the direction of a local physician. Visiting nurse does general nursing giving special attention to maternity work. Visiting housekeeper gives advice and demonstration in housekeeping and food preparation.

Financial: Budget for 1923 was \$5,000. This was obtained by membership dues, an appropriation from the city, and the annual drive.

General statement: The Child Welfare Society is one department of the Freeport Civic Center which includes the health and social agencies of the county.

INDIANA

Elkhart

CHILD WELFARE STATION, CHILD WELFARE DEPARTMENT OF THE ELKHART CHAPTER,
INDIANA LEAGUE OF WOMEN VOTERS

Organized September 14, 1923.

Aim: To reduce infant mortality rate and increase health of the coming generation by teaching the mother how to keep her child well.

Board: The governing board consists of 9 women.

Territory: The Station serves an urban territory with a population of 25,000.

Staff: The staff consists of a director of medical service, 2 doctors, part-time (volunteer), 1 director of nursing service, 1 staff nurse, 1 director of nutrition, 1 part-time nutrition worker, 12 volunteer workers.

Type of work: Educational and preventive work is done through home visiting for prenatal, infancy, and pre-school care and a health center for infants and pre-school children.

Financial: Supported by an appropriation from the community chest. Total budget \$5,000.

General statement: The cooperating agencies are the Associated Charities, City Health Department, Mother's Club, Indiana League of Women Voters, and Indiana Division of Infant and Child Hygiene.

RED CROSS PUBLIC HEALTH NURSING BUREAU

Organized October, 1919.

Aim: To teach the community that disease can be prevented by intelligent living and care of the body.

Board: Governing board consists of the officers and executive committee of the Elkhart Chapter of the American Red Cross.

Territory: The territory covers Elkhart City with a population of 25,000.

Staff: The staff consists of 1 supervisor, 3 nurses, 1 social worker and executive secretary. Volunteers: 1 nurse, 1 social worker (part-time).

Type of work: Prenatal, obstetrical, postnatal, pre-school, school nursing, tuberculosis nursing, bedside care; classes in home hygiene and care of the sick taught in health center. Health center furnishes health information and literature free of charge.

Financial: Community chest, Red Cross memberships, nursing fees and a per cent of all Tuberculosis Society Christmas Seals sold in Elkhart City. Chairman and treasurer of Red Cross chapter are held responsible for handling the finances.

General statement: Nurses personally carry to every prenatal case the best literature issued by the United States Government, State of Indiana, and other health organizations. Every expectant mother reported to our office is visited regularly. Home visits are made to school children in whom physical defects are found. Medical and dental care is furnished free to children unable to pay through cooperation of school board and men's clubs. Bedside care furnished to the public, free to those who cannot pay, 75 cents per hour to those who can. Every tuberculous patient reported by doctor or health officer visited twice every month or more often if needed.

Evansville

BABIES' MILK FUND ASSOCIATION

Organized 1912.

Aim: Infant welfare including prenatal, postnatal and pre-school care.

Board: The governing board consists of 5 men and 11 women.

Territory: The territory covered is both urban and rural with a combined population of 192,000.

Staff: The staff consists of an office secretary, a medical director, 18 doctors part time (free service), and obstetrician, an eye, ear, nose and throat specialist, and a skin specialist.

Type of work: Clinics are conducted for maternal, visual, and orthopedic cases, and health centers are maintained.

Financial: The budget for the year was \$11,000. The Association is financed by membership dues, appropriation from the city and county, and special contributions.

General statement: 4,311 patients visited the clinic during the year and 18,271 visits were made by the staff in 1922. In addition to the customary work a prenatal clinic was started. Since January 1 there have been 99 prenatal cases, 71 delivered to date, with 2 miscarriages, 1 stillbirth, 65 living babies and 25 active cases.

Huntington

HUNTINGTON COUNTY TUBERCULOSIS ASSOCIATION

Organized 1914.

Aim: The prevention and cure of tuberculosis.

Board: The governing board consists of 12 women.

Territory: The Association serves the entire county with an urban population of 14,000 and a rural population of 17,671.

Staff: Doctors: director of medical service, local physicians (free service). Social and nutritional service: 1 director (volunteer), 10 clerical assistants, 25 volunteers.

Type of work: Educational and preventive work is done by providing milk for malnourished school children who are unable to pay for it, home visiting and clinics for children and adults, and securing hospital care for patients.

Financial: Total budget is \$2,133 and is supported by Christmas Seal sale and special contributions.

General statement: The Society cooperates with the local medical association, Red Cross, Charity Guild, township and county councils, and Tri-Kappa Sorority as well as state and national agencies.

Indianapolis

FAMILY WELFARE SOCIETY

Organized November 1, 1922.

Aims: Family work, child problems, home finding, child placing, unmarried mothers, juvenile protective work, legal aid department.

Board: The governing board consists of 21 men and 8 women.

Territory: The Society serves an urban territory with a population of 346,000.

Staff: The staff consists of a general secretary, a director of social service; nutritional service: 1 director, 2 supervisors, 6 nutritionists full time, 2 (part time), 16 clerical assistants.

Type of work: The work is preventive and educational. Home visiting is done in connection with dependent children and other problems.

Financial: The Society is supported by funds from the community chest and contributions, budget \$185,000.

General statement: The cooperating agencies are the Child Hygiene Department of City Board of Health, Public Health Nursing Association and State Board of Health.

INDIANA STATE BOARD OF HEALTH, DIVISION OF INFANT AND CHILD HYGIENE

Organized October 1, 1919.

Aim: The protection and preservation of the health of children.

Board: Federal Maternity and Infancy Board, 2 men and 1 woman. State Board of Health, 4 men and 1 woman.

Territory: The work of the Division covers the entire state which has an urban territory with a population of 1,304,468, and a rural territory with a population of 1,626,076.

Staff: Doctors: 1 director, 4 department heads, 6 part time (short term), 276 part time (free service). Nurses: director, assistant director, 2 staff nurses (full time), 2 staff nurses (part time) for field conferences; 2 staff nurses in the department of maternity and infancy, 1 nurse (part time) in rest room and tents; 72 advisory dentists (free service), 1,880 volunteer workers. Office administration: director, secretary, maternity and infancy clerk, statistician, 2 stenographers, 1 general assistant.

Type of work: County health conferences in counties organized by townships; two mobile units.

Maternity and infancy, two departments; one conducting mothers' classes and infant clinics in a series of counties, the other doing intensive work in Lake County where they have organized 19 stations reaching a total of 500 babies.

Public health nursing, supervisory and cooperative.

Special rest tents and exhibits. Demonstrations and exhibits at county chautauquas, fairs and other gatherings. Administrative office which handles general plans, correspondence, publicity, business, organization for staff work, records and compilation of statistics and reports.

Financial: The State Board of Health appropriated \$20,000; the Federal appropriation for protection of maternity and infancy \$20,000 plus \$5,000.

General statement: During the 11 months ending August 31, 1923, child hygiene staff groups worked in 80 counties, visiting 475 towns. For maternity and infancy work a total of 10,705 children were examined and mothers advised concerning their care. This number does not include re-examination in the baby health centers. Talks by the director and other staff members numbered 463. Attendance at day conferences and evening lectures 65,898. Babies cared for at booths and rest tents 867. Literature distributed 168,426 pieces. Reports have been received from practically all counties concerning the value of the work.

PUBLIC HEALTH NURSING ASSOCIATION OF INDIANAPOLIS

Organized January 4, 1913.

Aim: To give skilled nursing care in the home, to teach hygiene and to prevent illness.

Board: The governing board consists of 24 women.

Territory: The Association serves an urban territory with a population of 335,260.

Staff and Nurses: 1 superintendent, 1 assistant, 1 educational director, 3 supervisors, 20 field nurses, 5 student nurses; a physician is in attendance at a general educational clinic held once a week for foreign patients; 4 nurses are trained for special care of crippled children in their homes. Clerical assistants: 4. A number of auxiliaries make all the surgical dressings used. Two auxiliaries make and furnish the nurses' aprons and towels.

Type of work: In addition to the regular visiting nursing, weekly clinics are held for diagnosis and disease prevention. Two health teaching centers are maintained.

Financial: The total budget for the year 1922 was \$41,798.43. The Association is supported by membership dues, donations and the community chest for the free work. It also has paid service.

General statement: The Health Teaching Center gives nine weeks experience in all phases of public health nursing to senior students of accredited hospitals. Prenatal and postnatal nursing and educational work have increased 40 per cent. Home care for crippled children has been developed during the year. Four nurses have been specially trained for this work, and a survey of the city was made, bringing to light over three hundred cases. The Children's Aid Association was discontinued as such November 1, 1922. The Infant Welfare stations, and what work was done from those stations in the homes, is now done by the Child Hygiene Department of the Board of Health. Public Health Nursing Association is doing a definite piece of work with children of pre-school age and intends to develop this work.

South Bend**CHILDREN'S DISPENSARY AND HOSPITAL ASSOCIATION**

Organized May, 1909.

Aim: To dispense free treatment to children under 16 years of age whose parents are unable to pay a physician's fee; also, free treatment to prospective mothers.

Board: The governing board consists of 24 women.

Territory: The territory covered is urban with a population of 70,983.

Staff: Superintendent, doctors 14 part-time (free service); nurses 3; dentists 6 part-time (free service); social worker, 1 part-time (free service), the remainder of the social service work is carried on by the nurses; clerical assistants, 4 part-time; volunteer workers 12 part time.

Type of work: Home visiting and clinical service offered to prenatal, obstetrical and postnatal patients, infants and school children. Surgical service for eye, orthopedic and dental patients.

Financial: The Association is supported by the community chest.

General statement: The Association cooperates with other agencies interested in child welfare. A special feature of the work is the orthopedic posture clinic, which is supported by a separate fund provided by a member of the board. Through the cooperation of the Y. M. C. A. and Y. W. C. A. directors who attend the clinics, the children receive the necessary corrective exercises.

IOWA**Des Moines****IOWA TUBERCULOSIS ASSOCIATION**

Organized 1915.

Aim: The promotion of public health with special reference to tuberculosis.

Board: The Association is governed by a board of directors, 25 of whom are appointed at large and the remainder elected or appointed by county and local associations as their representatives.

Territory: The work of the Association covers the state, with a population of 2,403,603.

Staff: Doctors: 2 part-time. Nurse: 1 supervising, 1 staff. Director of school health and modern health crusade. Clerical assistance 3.

Type of work: The work of the Association is educational and preventive. The Modern Health Crusade was conducted in the schools. Literature and exhibit material was distributed and health news and feature articles were furnished the newspapers regularly. Films were loaned speakers and clinicians. Staff nurses were furnished and tuberculosis clinics were conducted. Nurses' supplies and school scales were also distributed. During the year the Association distributed 1,200,000 pieces of literature, helped securing the passage of 19 important health measures and wrote the Physical Educational Bill which is now a law. The Association cooperates with the State Departments and private organizations interested in health sanitation, and child welfare.

Iowa City**IOWA CHILD WELFARE RESEARCH STATION**

Organized 1917.

Aim: To investigate the best scientific methods of conserving and developing the normal child, disseminate the information acquired by such investigations and train students for work in such fields.

Board: The advisory council consists of 5 men and 1 woman.

Territory: The Station is conducted in connection with the State University. The state has a large rural territory.

Staff: Director. Collaborators: 11 special, 10 part time. Nurses: 3 supervisors. Social workers: 1 full time, 2 part time. Nutrition workers: 3 full time, 1 part time. Two workers in eugenics. Six workers in child psychology. Clerical assistants: 8.

Type of work: The work is largely research work with children from infancy to adult life and is carried on through the Research Station, home visiting, schools, clinics and hospital work. Special work is carried on in nutrition, sociology, eugenics, psychology and anthropometry.

Financial: The station is supported by the state, the National Woman's Christian Temperance Union, and a contribution from the Laura Spelman Rockefeller Memorial Fund of New York City.

General statement: The results of these scientific studies are published from time to time.

KANSAS

Cedar Vale

AMERICAN RED CROSS

Organized 1917.

Aim: Health and Relief work.

Board: The governing board consists of 3 men and 5 women.

Territory: Urban territory is covered with a population of about 5,300 and rural territory with population of about 6,700.

Staff: Doctors: 5 part time (volunteer). Nurses: 1 staff nurse. Dentists: 4 part time (volunteer). Volunteers: 30.

Type of work: Preventive work is carried on through home visiting of maternal, prenatal and obstetrical patients, infants and school children, and clinics for infants and pre-school children. Educational work is done by conducting classes for school children.

Financial: Supported by membership dues, with a budget of \$2,500.

The Red Cross has a county health nurse who visits schools and homes. She examines all the school children. Two Red Cross tents were maintained at the county fair held at Sedan, Kansas, where 105 babies were examined, and a float and school health posters exhibited.

Wichita

PUBLIC HEALTH NURSING ASSOCIATION

Organized February, 1919.

Aim: To benefit those otherwise unable to secure skilled assistance in time of illness; to promote cleanliness and to teach proper care of the sick; and to establish and maintain one or more hospitals for the sick, or a home or homes for the accommodation or training of nurses.

Board: The governing board consists of 16 men and 11 women.

Territory: The Association serves both urban and rural territory with a total population of 82,128.

Staff: Doctors: 9 part time (6 of whom are volunteers). Nurses: 1 director, 1 supervisor, 15 staff. Clerical assistants: 2.

Type of work: A great deal of preventive work is done. Home visiting, clinics, and hospital care is given to expectant mothers, infants and children. Health centers are maintained. Maternity service day and night.

Financial: The total budget for the year was \$25,000. The Association is supported by membership dues, contributions, appropriations, community chest and fees.

General statement: Total visits made by staff for the year 27,074.

KENTUCKY

Louisville

NEIGHBORHOOD HOUSE

Organized 1896.

Aim: For recreational and educational purposes and to do work generally known as settlement work.

Board: The governing board consists of 8 men and 3 women.

Territory: Not only the immediate community but the whole state because the Head Resident is chairman of the Kentucky Child Welfare Commission.

Staff: The staff consists of a head resident. The medical, nursing and dental service is under the supervision of the Public Health Nursing Association, which provides the following: Doctors: 2 part-time (volunteer); nurses: 1 supervising, 4 staff; social service: 5 full-time (paid), 12 part-time (paid), 40 volunteers; 2 clerical assistants, 30 volunteers. The social workers are mainly recreational workers with a knowledge of case work and director of the Music School.

Type of work: Infant clinics are conducted and a general health center is maintained for preventive and educational work.

Financial: Budget for last year was \$30,000. Supported by the Welfare League and appropriation from the state. A small fee is paid by members of music school and clubs. The Park Board of the city furnishes two playground workers during the summer season.

General statement: Neighborhood House cooperates with all the agencies in the city doing health work. It sends its children and adult neighbors to clinics of every kind. At times groups have been organized for dental and other clinics. The Public Health Nursing Association conducts an infant clinic twice a week at the Settlement. Mothers' clubs often adopt health programs for the year. Groups have given health plays and taken part in health exhibits. Children belonging to gymnastic classes are examined to determine their fitness to join. Wherever it is possible families are brought in touch with the Public Health Nursing Association.

PUBLIC HEALTH NURSING ASSOCIATION

Organized January 1, 1920.

Aim: To provide skilled nursing care for the sick in their homes and to decrease infant mortality.

Board: The governing board consists of 4 men and 26 women.

Territory: The Association serves an urban territory with a population of 300,196. (Increase due to annexation of territory.)

Staff: Superintendent, educational director, 3 supervisors, 28 staff nurses, 3 clerical assistants; medical director and 9 assistants; 40 volunteer workers.

Type of work: Ten infant welfare clinics are conducted weekly; "Little Mothers'" League classes are held for school children in the school. The Association cooperates with the City Hospital in conducting a prenatal clinic. Home visiting is an important part of the work of the association.

Financial: The total budget for the year 1923 is \$63,774. The Association is supported by the community chest, appropriations, fees, and an income from the Metropolitan Life Insurance Company.

General statement: During the past year the Association has supervised 3,343 babies. At the present time there are 2,324 enrolled. During the year 482 infant welfare clinics were conducted with an attendance of 9,776; 34,152 home visits were made to the babies. The infant mortality rate for infants under 1 year is 17 per 1,000, over 1 year 9 per 1,000. During the year 1,123 patients were given prenatal care; 4,851 home visits were made to these patients; 86 prenatal clinics were conducted at the City Hospital. Attendance, 1,958.

Out of 1,123 prenatal patients, 446 were given postnatal care by the Association. 2,507 postnatal visits were made, 154 patients were delivered in hospitals, and 16 by midwives. There were 7 miscarriages. Of the total number of patients under supervision during the year, there were 3 maternal deaths and 13 infants deaths, at time of delivery.

LOUISIANA

New Orleans

CHILD WELFARE ASSOCIATION OF NEW ORLEANS

Organized May, 1913.

To secure adequate medical and nursing care for every member of every family in need of such care.

Board: The governing board consists of 19 men and 8 women.

Territory: The Association serves an urban territory with a population of 385,000.

Staff: Executive; director of infant welfare; director of maternity service. Doctors: 9 part time. Nurses: 1 supervisor, 28 staff. Dentists: 1 supervisor, 2 part time. Clerical assistants: 4. Volunteer workers: 208.

Type of work: Clinics are held for infants, pre-school children, prenatal, obstetrical, and postnatal patients. Home visiting is another phase of the work.

Financial: The budget for the year was \$62,000. The Association is supported by membership dues, appropriations from the city and state, special contributions, and fees.

General statement: During the year the maternity service gave complete care to 340 cases. In addition to the usual obstetrical nursing care supplied to patients with private physicians, the Child Welfare Association also maintains a maternity service by which both physician and nurse are supplied. Patients registering for this service are charged a fee that ranges from \$15 to \$25 according to income. In this, as in other branches of the service, a separate staff of negro nurses and negro physicians, under white supervision, is maintained to care for the negro patients.

MAINE

Augusta

MAINE PUBLIC HEALTH ASSOCIATION

Organized July 13, 1921.

Aim: To foster and promote education in all matters pertaining to public health; to distribute literature on public health; to employ public health nurses to cooperate with the State Departments of Health and State Department of Education and all other institutions and associations actually engaged and interested in educational and public health work; to form local public health associations; to conduct an educational campaign in all phases of public health activities; and to take and hold by purchase, gift, devise or bequest personal or real estate, in all not exceeding in value one hundred thousand dollars owned at any one time and to use and dispose of the same for the above named purposes.

Board: There are 36 persons on the governing board.

Territory: The work of the Association covers the State with an urban population of 145,232 and a rural population of 622,764.

Staff: The staff consists of an executive, 20 part-time doctors (volunteer), 1 director of nurses, 1 supervising nurse, 1 supervising dentist, 15 part-time dentists (volunteer), 2 clerical assistants and 10 volunteers.

Type of work: The work includes clinics and home visiting for maternal, prenatal, infancy, pre-school, school and adult groups; classes and health centers for maternal and prenatal groups.

Financial: Budget for 1922 was \$24,650. The organization is supported by membership dues, contributions, and seal sale.

General statement: The cooperating agencies are the Associated Charities, State Parent-Teachers Association, Granges, Federation of Women's Clubs, Maine Medical Society, Maine Dental Society. All medical policies are supervised by an Advisory Committee named by the Maine Medical Association. The same committee serves the Maine Medical Association as its committee on Public Relations. The Personnel of the committee includes a president, a secretary of the Maine Medical Association, the editor of the Journal of the Maine Medical Association, and three medical members of the Executive Committee and the State Commissioner of Health.

In carrying out this policy of cooperation with the medical profession the county medical societies in practically every Maine county have named similar committees which serve the volunteer health association in the county as a Medical Advisory Committee. This county committee usually includes the doctor most active in volunteer health work, the secretary of the County Medical Society and the District or County Health Officer.

Portland

PORTLAND BABY HYGIENE AND CHILD WELFARE ASSOCIATION

Organized June, 1919.

Aim: Maintenance of a day nursery, milk station and clinics for children, home hygiene instruction, and introduction of nutrition work in public schools.

Board: The governing board consists of 25 women.

Territory: The city with a population of 70,000.

Staff: The staff consists of 1 executive; Doctors: 10 part-time (volunteer);

Nurses: 1 supervisor. **Nutritionists:** 1 supervisor, 1 full-time, 1 part-time. **Clerical assistants:** 1. **Volunteers:** Junior League.

Financial: The Association is supported by special contributions.

MARYLAND

Baltimore

THE BABIES MILK FUND ASSOCIATION

Organized 1904.

Aim: Educational and preventive work.

Board: The board consists of 16 men and 28 women.

Territory: The Association serves an urban territory with a population of 765,554.

Staff: Medical director, executive secretary, assistant superintendent of nurses, 1 supervisor and 24 staff nurses.

Type of work: Home visits by nurses, 37 conferences during week held at seventeen centers including prenatal, infant and pre-school welfare.

Financial: The budget for the year was \$48,000. The Association is a member of the Baltimore Alliance.

General statement: The number of patients given home care during the year was 9,322; the number of home visits paid 60,840; the number of patients who visited the clinics 24,507.

FLORENCE CRITTENTON MISSION, INCORPORATED

Organized 1896.

Aim: To provide a home where unfortunate and wayward girls may receive proper care; be taught those things that are essential to their well-being, both cultural and industrial; and where under the influence of Christian example and teaching they may be helped to return to normal relations in society.

Board: The governing board consists of 15 men and 13 women.

Financial: The total budget for the year was \$15,215.67. The Mission is supported by dues, donations, and state appropriations.

General statement: During the year 1922 the Mission cared for 103 girls and 94 babies. Many of these girls coming to the Mission practically homeless, friendless and untrained, meet a spirit of sympathy and a helpfulness, which changes their entire outlook on life. The training which they receive in nursing, needlework, and household arts, equips them to earn their own living. The Mission also cares for the city's foundlings. Due to the scientific treatment and careful nurture which they receive, most of them grow into healthy babies and are adopted into good homes. The mortality rate is very low.

HEALTH DEPARTMENT, BUREAU OF CHILD WELFARE

Organized February 1, 1919.

Aim: Promotion of health and conservation of lives of mothers, infants, and young children.

Board: The Bureau is a sub-department of the Department of Health of Baltimore City.

Territory: The Bureau serves an urban territory with a population of approximately 765,032.

Staff: Director, with 1 assistant and office force (4), obstetricians, 1 full time, 3 part time, pediatricists, 2 part time; nurses, 25 field, 1 social service, 3 obstetrical.

Type of work: Prenatal clinics for expectant mothers (5), obstetrical care in homes; postnatal care of mother and child; welfare clinics for the pre-school child from birth to school age; dispensary for sick children; day nursery for colored children. Nurses visit every new born baby, mothers are instructed, care secured for sick children, boarding homes supervised, instructive leaflets, birth certificates, weight and height cards distributed.

Financial: The budget for the year 1922 was \$65,850 (inc. nurses' sal.).

General statement: The plan of work for the year 1924 includes the establishment of 5 additional pre-school conferences. It is hoped that in the near future a maternity hospital may be established in the city and the present plan of prenatal clinics extended to cover the entire city.

MASSACHUSETTS

Boston

THE BOSTON FLOATING HOSPITAL

Organized July 1, 1894.

Aim: To care for and relieve the sick babies of parents, unable to provide the best air, food, care and medical skill; to make a careful scientific study of the diseases of children, especially those connected with the gastro-intestinal tract; to train and instruct medical students, nurses and mothers in the care and treatment of sick babies.

Board: The Hospital is governed by a board of 15 men.

Territory: The entire City of Boston is served as well as other localities.

Staff: Executive secretary. Doctors: 1 supervisor, 1 full-time, 4 volunteer. Nurses: 1 supervisor (personnel distributed at close of season). Clerical assistants: 2. Volunteer workers: 2.

Type of work: Home visiting, clinics, classes and hospital care for mothers and children compose the greater part of the service. Preventive and educational work is carried on through home visiting, clinics and hospital work. A health center is maintained for infants.

Financial: The budget for the year was \$75,032.24. The Hospital is supported by contributions.

General statement: The Hospital spends each day and night of summer on the ocean. During the fall and winter follow-up work is given by nurses acting under medical direction from the "on shore" hospital and clinics of the Floating Hospital.

COMMUNITY HEALTH ASSOCIATION

Organized: December 29th, 1922, when persons designated by the Board of Managers of the Instructive District Nursing Association and by the Board of Trustees of the Baby Hygiene Association constituted a joint managing committee to supervise the conduct of the work of each Association in cooperation with that of the other.

Aim: To direct the management of the work of the Instructive District Nursing Association and of the Baby Hygiene Association, subject always to the Board of Managers of the Instructive District Nursing Association and to the Board of Trustees of the Baby Hygiene Association, to the end that through a joint management the work of each Association, while remaining the separate work of that organization, might be conducted in such cooperation with the work of the other organization that increased economy and efficiency of operation could be effected.

The stated purposes of the two organizations have been greatly amplified and extended during the course of development of each. The Instructive District Nursing Association was established 37 years ago to give nursing care and instruction to the sick poor.

The Baby Hygiene Association was established 14 years ago to encourage breast feeding; to provide pure milk properly modified for babies who cannot be nursed; to furnish mothers advice and training in hygiene and care of babies, and to assist in improving the general milk supply.

The ideals of the two were the same—to bring facilities for health to the families in which the public health nurses work. Their natural development has tended to make their objective identical—to raise the standard of health in every family they serve.

Board: The governing board consists of 33 members, with 5 additional members ex-officio.

Territory: Metropolitan Boston.

Staff: The staff consists of 34 doctors, 161 nurses, including the General Director, the directors of individual departments, supervisors and staff nurses, 12 nutrition workers, 25 office workers, 4 in the mental hygiene department, 2 house mothers.

Type of work: The Association offers twelve health services: Bedside nursing and health teaching, prenatal, care at confinement, postpartum, well baby, pre-school, orthopedic (including after care of poliomyelitis chronic cases and posture work), nutrition, mental hygiene, care of communicable diseases, excepting scarlet fever and diphtheria, industrial nursing, dental care.

The Board of the Community Health Association has adopted the policy that each nurse shall perform as many types of nursing service in a home as are practical without impairing the efficiency of the work, and that experts in special subjects are necessary and shall be employed to carry out this policy.

Financial: The Association is financed by voluntary contributions, and payments for services rendered.

DEPARTMENT OF PUBLIC HEALTH, THE COMMONWEALTH OF MASSACHUSETTS

The Massachusetts Department of Public Health, so far as its Division of Hygiene is concerned, is an advisory body. It does no case work in the ordinary sense of the word, consequently its activities are largely educational in character and have for their purpose the encouragement of new work on the part of the different municipalities of the state. The outstanding activities of the year are:

1. Extension of work for the promotion of maternal and infant hygiene.
2. A special campaign for the promotion of breast-feeding.
3. Regional conferences on maternal and child hygiene.
4. Courses in nutrition for school nurses.
5. Conferences for school physicians, nurses, school superintendents, and others interested in the medical supervision of the school child. These conferences are participated in by the State Department of Education.
6. Wide extension of newspaper and other health education service.

MASSACHUSETTS PARENT-TEACHER ASSOCIATION, INC.

Organized 1910. Incorporated 1920.

Aim: To promote high standards of home life and cooperation between parents and teachers, in order to secure the best physical, mental and moral development of the child.

Board: The governing board is composed of 3 men and 22 women.

Territory: The Association covers the entire state in its work.

Type of work: By forming, guiding, and binding together local associations, it promotes the study of the child, a knowledge of existing conditions in home, school, and community, and stimulates constructive work to meet the needs of the children.

General statement: The Association has 10,000 members in 140 local groups; some in cities, some in towns, some in small rural communities. It is a branch of the National Congress of Mothers and Parent-Teacher Associations whose membership is 550,000.

A great effort is now being made to encourage training for the home and for parenthood. A survey of schools and colleges with a view to finding out where such courses are given is under way. A new University Extension course for parents of children of pre-school age was established in 1923 by the Department of Education of Massachusetts, at the suggestion of the Massachusetts Parent-Teacher Association. The Association is cooperating with other agencies in holding a Parenthood Institute for one week at the Boston Health Show, October, 1923.

The first Parent-Teacher Summer Schools in Massachusetts were held at the Hyannis Normal School and at Boston University, July, 1923.

SUNNYSIDE DAY NURSERY

Organized 1889.

Aim: To maintain a day nursery and classes for neighborhood children.

Board: The governing board consists of 1 man and 18 women.

Territory: Covers the City of Boston.

Staff: The staff consists of a matron, 2 doctors, part-time (volunteer), 1 supervisor of social work, part-time, 1 nutritionist, part-time (volunteer), 6 volunteer workers.

Type of work: Clinics and classes are held for pre-school and school groups.

Financial: The Nursery is supported by subscriptions and donations.

General statement: The children are under medical supervision and all cases requiring treatment are referred to the local hospitals or dispensary. The Harvard Dental School cares for all dental cases. A nutrition class is conducted weekly at which the mothers attend with their children.

East Boston**MAVERICK DISPENSARY, INC.**

Organized 1908.

Aim: The Dispensary was organized to furnish medical aid by daily clinics and by district service both to relieve and to prevent disease.

Board: The governing board is composed of 10 men and 10 women.

Territory: The dispensary serves one section of Boston, i. e., East Boston, with a population of approximately 63,000.

Staff: Head worker who also supervises the social service work. Doctors: 6 part-time. Dentists: 1 dental hygienist, 2 part-time; 1 nurse, 1 nutritionist, 2 clerical assistants, 1 volunteer worker.

Type of work: Eye, dental, and mental clinics are held for both infants and children. Nutrition and posture classes are held for children.

Financial: The budget for the year was \$12,000. The Dispensary is supported by donations and fees.

General statement: 5,912 patients made 17,327 visits to the Dispensary during the past year.

Fall River**INFANT WELFARE COMMISSION**

Organized February, 1923. Field work started in January, 1923, therefore the report covers three months' work.

Aim: To reduce the death rate of babies, particularly the death rate of infants under one month. To reduce the number of stillbirths and miscarriages. To prevent maternal deaths. To prevent illness and promote health among mothers and babies.

Board: The governing board consists of 5 men.

Territory: The territory covers one city ward with a population of 25,000.

Staff: Doctors: 2 part-time. Nurses: 1 supervisor, 3 staff. Clerical assistants: 1 part-time.

Type of work: Preventive and educational work is carried on through home visiting and clinics for prenatal, infancy, and pre-school care and classes in prenatal care.

Financial: The Commission is supported by an appropriation from the city. Budget for 1923 was \$15,000.

General statement: The three staff nurses were sent to the Maternity Center Association, New York City, for three weeks' observation and instruction.

Falmouth**FALMOUTH NURSING ASSOCIATION, INC.**

Organized May 25, 1916.

Aim: The prevention of disease and the promotion of health in the community.

Board: The governing board consists of 1 man and 11 women.

Territory: Rural territory is covered.

Staff: The staff consists of an executive (volunteer), 1 supervising nurse, 1 general nurse, 2 part-time dentists, and 1 clerical assistant.

Type of work: Home visiting for maternal, prenatal, obstetrical, and postnatal cases, infants, and pre-school children. Clinics are conducted for school children for the care of visual, dental, mental diseases and tuberculosis. A health center is maintained for school and adolescent children.

General statement: The Association cooperates with the Board of Health, Barnstable County Sanatorium, and Society for Prevention of Cruelty to Children.

Fitchburg

VISITING NURSE ASSOCIATION

Organized 1913.

Aim: Nursing the sick is the primary function of the Association.

Board: The Association is governed by a board of 8 men and 10 women.

Territory: The Association serves an urban territory with a population of 41,000, also two adjoining towns with school nursing.

Staff: Superintendent, 1 maternity nurse, 1 school nurse, 8 staff nurses, 2 doctors, part-time, and 1 clerical assistant.

Type of work: Home visiting, particularly for mothers and infants, is the chief work of the Association. Clinics for infants are also held.

Financial: The budget for the year was \$19,206.30. The Association is supported by contributions and subscriptions.

General statement: The nurses of the Association do generalized nursing. They visit the sick; give prenatal and postnatal care; make baby hygiene calls; give first aid in three industrial plants, and one nurse gives maternity delivery care night or day. One nurse spends 4 days a week in two adjoining towns doing school nursing. One home hygiene class taught in high school. Four baby hygiene clinics held weekly.

Great Barrington

VISITING NURSE ASSOCIATION, INC.

Organized 1908.

Aim: The object of the Association is to minister to the sick and the needy, and enable them to enjoy the benefit of trained and skillful nursing; assisting to establish and maintain the health and physical welfare of children, and of all other persons, giving instruction in the elementary principles of hygiene, sanitation, diet, and the prevention of disease.

Board: The governing board consists of 10 women.

Territory: The Association serves six towns with a population of approximately 9,731.

Staff: The staff consists of 1 supervising nurse, 3 staff nurses, 1 supervising dentist, 5 part-time dentists and 1 clerical assistant.

Type of work: Home nursing care given to maternal, prenatal, obstetrical, and postnatal cases, infants, children, and adults; clinics are held for infants, and for eye, nose, throat and dental cases; a health center is conducted.

Financial: The Association is supported by an appropriation from the town, contributions, house campaign and fees. The budget for past year was \$14,000.

General statement: A child welfare program has been developed which includes free monthly home visits to children under 5 years. Babies on discharge from bedside care are transferred to the child welfare department. Weekly child welfare conferences at two offices where mothers bring their babies to be weighed. Only advice in infant hygiene is given, extreme care being taken not to give medical attention. There is no attending physician but the doctors often advise their patients to bring the babies for regular weighing. At the annual Child Health Conference in June a member of Massachusetts State Department of Public Health assists in the health examinations. These have proved very successful and stimulate interest in frequent health examinations. The opposition to developing any valuable prenatal or tuberculosis work it is hoped will be overcome in time.

Holyoke

HOLYOKE CHILD WELFARE COMMISSION

Organized April, 1911.

Aim: To carry on preventive and educational work.

Board: The governing board consists of three men and three women.

Territory: The Commission serves an urban territory with a population of 65,000.

Staff: The staff consists of a medical director, 3 doctors part-time, a supervising nurse, one prenatal nurse, one station nurse, two clerical assistants, and two volunteer workers.

Type of work: Home visiting, clinics and hospital care are offered to prenatal, obstetrical and postnatal patients, as well as to infants and pre-school children.

Financial: The budget for the year was \$26,989.40. The Commission is supported by the city.

General statement: 5,287 visits made on 604 babies during the year by the staff of the Commission.

New Bedford

INSTRUCTIVE NURSING ASSOCIATION

Organized 1891. Incorporated 1900.

Aim: To provide skilled nursing care and such other service as is needed for the sick in their homes, and for the teaching of hygiene and sanitation.

Board: The governing board consists of 14 women.

Territory: The Association serves an urban territory, with occasional calls outside of city not covered by other nursing service, the population is approximately 125,000.

Staff: Superintendent. Nurses: 2 supervisors, 11 staff. Clerical assistant: 1. Volunteer workers: 10.

Type of work: General bedside nursing including the care of maternity patients and those with the so-called minor communicable diseases. Home visiting and mothers' classes for prenatal patients.

Financial: The budget for the year is \$29,425. The Association is supported by fees paid for nursing service, the Community Welfare Fund, and special contributions.

General statement: A survey of the health agencies of the city was recently made by Dr. C. E. A. Winslow, who recommends that this Association organize a group of prenatal clinics under an advisory medical board and that nursing care at the time of confinement be offered by this Association as soon as is practicable.

NEW BEDFORD CHILDREN'S AID SOCIETY

Organized 1842.

Aim: To care for destitute, neglected, and wayward children of either sex and of any race or creed, by providing them so far as possible with close supervision in selected family homes.

Board: The governing board consists of 21 women.

Territory: The Society serves both urban and rural territory. The population of New Bedford is 131,000.

Staff: A general secretary and a supervisor. Visitors: 5. Clerical assistants: 4.

Type of work: The Society furnishes supervision and care for both unmarried mothers and children.

Financial: The total budget for the year was \$43,094.71. The Society is supported by membership dues, contributions, community chest and fees.

General statement: The total number of children cared for during the year was 259.

Springfield

SPRINGFIELD DAY NURSERY CORPORATION

Organized June, 1883. Incorporated May, 1895.

Aim: To aid the poor of the City of Springfield by conducting a day nursery, and such other agencies as the Corporation may from time to time determine.

Board: The advisory board consists of 5 men and 27 women.

Territory: The work of the Corporation covers an urban territory with a population of 135,000.

General statement: The Springfield Day Nursery Corporation is composed of two nurseries, one at 27 Pendleton Avenue and the other at 103 Williams Street.

SPRINGFIELD VISITING NURSE ASSOCIATION

Aim: To promote the health of Springfield. It seeks not only to alleviate suffering by skilled bedside nursing but to teach preservation of health by instruction to families in the simple rules of nursing and hygiene.

Board: The governing board consists of 8 men and 17 women.

Territory: The Association serves the City of Springfield with a population of 130,000.

Staff: The staff consists of a director, medical director, 11 doctors (volunteer), 1 general supervising nurse, 2 special supervising nurses, 14 staff nurses, 1 clerical assistant and 6 volunteers.

Type of work: Home visiting and clinics are maintained for maternal, prenatal, obstetrical, postnatal, infancy, pre-school, adolescence and adult cases.

Financial: The organization is supported by fees collected, Metropolitan Life Insurance Company and community chest.

General statement: A nutrition clinic was started in June.

MEXICO

Colombia

STATE DEPARTMENT OF HEALTH

Organized October 10, 1922.

Aim: To increase health and prevent disease.

Territory: City and districts 10, 20, 30, and 40.

Staff: The staff consists of a medical director, 3 doctors part-time, director of nurses, 2 supervising nurses, 3 staff and 4 special nurses, director of nutrition service, 2 supervising nutritionists, 2 clerical assistants.

Type of work: Home visiting and clinics for prenatal care and instruction; clinics for postnatal patients.

Financial: Supported by State funds.

General statement: Through the year 2,278 visits were made by patients to the prenatal clinic; 1,644 home visits were made to prenatal patients; 6,235 visits were made by patients to the postnatal clinic.

MICHIGAN

Detroit

BABIES MILK FUND OF DETROIT

Organized 1906.

Aim: To conduct a prophylactic clinic and follow-up work.

Board: The governing board is composed of 4 men and 15 women.

Territory: Both urban and rural territories are served.

Staff: Doctors: 1 director, 2 part-time. Nurses: 1 superintendent, 4 staff.

Type of work: Home visiting and clinics for infants and children are conducted. Preventive, educational, cardiac, and orthopedic care is given.

Financial: The Association is an auxiliary of the Visiting Nurse Association; the budget for 1922 was \$14,886.35. The Association is supported by the community fund.

General statement: There were 253 clinics held during the year, with an attendance of 4,718 patients. The clinic at Hamtramck has had an increased attendance since locating at the Tau Beta Community House. Some fifty or sixty day nursery children attend the clinic for regular weekly examinations.

CHILDREN'S HOSPITAL OF MICHIGAN

Organized in 1922. An amalgamation of the Children's Free Hospital Association, Detroit, and the Michigan Hospital School, Farmington.

Aim: To care and provide for the sick, suffering or crippled children without discrimination as to race, creed, or color, and to furnish such medical, surgical, nursing, and educational aid as they may require; to maintain a training school for nurses; to establish and maintain such research and teaching facilities as are desirable for the development of medical and surgical science, and to do all things necessary or appropriate to such ends.

Board: The Hospital is governed by a permanent board of trustees of 39 men and women.

Territory: The Hospital serves the City of Detroit and does orthopedic work for the entire State of Michigan.

Staff: Superintendent and assistant with 2 instructors, 6 supervisors, 1 physiotherapist, 1 laboratory technician, 1 X-ray technician, 1 dietitian, 32 student nurses, 45 affiliated student nurses, 5 post-graduate student nurses, 1 pharmacist. House staff: 2 resident physicians and 4 internes. Social service department: director, secretary and 4 graduate assistants. Medical staff: consulting staff of 12 physicians and surgeons, an active staff with directors of department who have 35 associates and assistants.

Type of work: A general hospital for children caring for everything except contagious diseases, with a 100-bed convalescent home in Farmington. The medical staff holds weekly clinics for the discussion of important cases. The general staff and executive committee hold monthly meetings. The students of Detroit College of Medicine receive daily bedside instruction in the hospital. The medical staff devotes considerable time to lecturing to student nurses of the hospital.

Financial: The budget of the hospital for the current year was \$273,000. The hospital is supported by income from its endowment fund, some contributions from the patients which amount to about 5 per cent of the expenses, and the deficit is made up by the Detroit Community Fund.

General statement: The outpatient department continues to grow and widen its scope each year. Daily clinics are held in the medical, surgical and orthopedic departments and clinics four times a week in the various specialties. The social service department has been considerably enlarged and special workers are maintained for the orthopedic, cardiac, and chorea cases.

MERRILL-PALMER SCHOOL

Organized February 5, 1920.

Aim: The promotion and development of education in home making and child-care.

Board: The governing board consists of 7 men and 6 women.

Territory: The school serves both an urban and a rural territory.

Staff: Director; specialist in psychology; specialist in nutrition, 1 assistant and 1 field worker; specialist in extension; 3 nursery school teachers; 1 supervisor of medical service; registrar; business manager; 3 clerical assistants.

Type of work: General education in the fundamentals of nutrition and courses in home making. Better methods of teaching child care and management are developed.

Financial: The budget for the year 1923 was approximately \$100,000. The society is supported by an endowment and a small tuition fee.

General statement: The School is developing programs of work, first of an extension type which reach larger groups in the community, and second of intensive character which in the beginning at least can reach only a limited group since the formulation of courses is one of the problems undertaken and this cannot be accomplished with large groups. A special project for the year was the establishing of a nursery school for children between the ages of two and five and the development of child-care courses for students from a number of colleges and universities.

Grand Rapids

CLINIC FOR INFANT FEEDING

Organized 1911.

Aim: Strong healthy babies and children; strong healthy mothers. To have every child entering school free from every removable physical defect; with a healthy mind and good habits of living.

Board: The governing board consists of 25 members.

Territory: The clinic serves the entire City of Grand Rapids which has an approximate population of 149,101.

Staff: Executive secretary. Doctors: 1 director, 24 volunteers. Nurses: 1 director, 2 supervising, 12 staff, 9 of whom are infant welfare nurses, 3 prenatal and 1 in charge of Little Mothers' League. Dentists: 2 volunteers. Nutritionists: 1 supervisor, 3 part-time. Clerical assistants: 2. Volunteer workers: 24.

Type of work: Home visiting and clinics for prenatal and postnatal patients and for infants and children are maintained. A health center is maintained for prenatal patients.

Financial: The budget for the year was \$38,729. The clinic is supported by appropriation from the city, by special contributions, and a share from the community chest. Nursing service is paid for when possible.

General statement: The clinic uses a continuous record beginning with the prenatal period and extending up to school age; the school nurse then assumes the responsibility. The fifth infant welfare station was established in November, 1922. The increase in the negro population and the consciousness of their own needs has led to the establishment of a community clinic in the African Methodist Episcopal Church, which, like all stations operated by the Clinic for Infant Feeding, is for the treatment of any child under school age. Monthly visits to every baby under one year of age born in the City of Grand Rapids have had the effect of prolonging the nursing period and of making maternal nursing possible in many cases where previous babies had been bottle fed. They have also resulted in the increased amount of mothers' milk collected for distribution to sick and premature babies.

Lansing

MICHIGAN DEPARTMENT OF HEALTH

BUREAU OF CHILD HYGIENE AND PUBLIC HEALTH NURSING

Organized September 15, 1920.

Aim: The aim of the Bureau is to reduce both maternal and infant mortality and morbidity in the state through education in prenatal and infant care; to demonstrate the value of public health nursing service throughout the state through an educational program and the development of community responsibility in health problems and the importance of local committees assuming the financing of such work.

Territory: Covers the entire state.

Staff: 1 director (doctor), 1 assistant director (nurse), 2 associate physicians, 6 staff nurses, 1 organizer, 1 secretary, 1 clerk.

Type of work: Infant and prenatal clinics; establishment of mother and baby health centers; organization of county health committees and health center committees; education through classes in infant and prenatal care and the distribution of literature.

Financial: Amount of budget, \$64,482.22.

General statement: Much stress on prenatal care, care of pre-school child, breast feeding of infants, and periodic or keep-well examinations.

MINNESOTA

Duluth

SCOTTISH RITE INFANT WELFARE DEPARTMENT

Organized 1910.

Aim: The aim of the Masonic Infant Welfare Department is to keep well babies well. The work is purely educational. They try to lead the mothers to see the wisdom of preventive care, and also the immense value of early advice and a right start. They have no financial standard by which to determine the admissions to the clinics, all are welcome within the age limit, which is 2½ years. The babies are registered, weighed, examined by a pediatrician, and advice given as to diet and general care. When the clinic children become ill or are in need of any special medical attention, they are immediately referred to their family physician and are not readmitted to the clinic until discharged by him. The Department cooperates with all the charitable organizations of the city.

Board: The Department is directed by the Scottish Rite Masons.

Territory: The work of the Department covers the entire City of Duluth, the population of which is 100,000.

Staff: The staff consists of a director; doctors: 1 medical director, clinic physicians, 2 part-time. Nurses: supervisor 1 (full-time), assistant nurses 2 (full-time). Volunteer workers 8 (part-time).

Type of work: Home visiting and infant welfare clinics. Work of nurse in home consists of advice and demonstrations (preparation of foods, and so forth).

Financial: Financed by Scottish Rite Masons.

General statement: Four infant welfare stations are maintained. Clinics are held weekly at each station. Follow-up work is done by the nurses after each clinic. During the year 5,909 visits were made by the nurses, 869 new babies were admitted to the clinics, 3,799 were reexamined and 422 were readmitted, which makes a total clinic attendance of 5,090. Outfits of children's clothing and layettes are made by the members of the Eastern Star to be distributed to needy families. Milk and prescriptions are also supplied to needy families. Literature pertaining to the care of the baby is distributed at the clinics.

Minneapolis

DIVISION OF CHILD HYGIENE, STATE BOARD OF HEALTH

Organized July, 1922.

Aim: To promote the welfare and hygiene of maternity and infancy.

Board: Federal Board of Maternity and Infant Hygiene, 2 men and 1 woman. Minnesota State Board of Health, 9 men.

Territory: Serves an urban and rural territory with a population of 2,387,125.

Staff: The staff consists of 1 director, 1 state superintendent, 2 representative field nurses, 3 temporary representative field nurses, 1 vital statistics agent, 6 clerical assistants. Clinic physicians engaged as occasion demands, 1 special agent.

Type of work: Educational.

Financial: Budget for the year amounted to \$47,199.30. Supported by Federal, State, and County appropriations.

General statement: The three large centers of population, Minneapolis, St. Paul, and Duluth for several years have had facilities for carrying on maternal and infancy hygiene work and are not included in the work of the State. Close cooperation with state organizations and institutions, and the University Medical School in its Departments of Obstetrics and Pediatrics and the Extension Division has lessened the difficulties of planning work to extend over a scattered population.

In organizing the State Board of Health, the State Board provided for the formation of a State Advisory Board on maternal and infant hygiene consisting of 4 men and 5 women, representing the organized medical and nursing professions of the State as well as the educational agencies and the organized women of the State. The duties of this Board are to advise and suggest in the administration of the Sheppard-Towner work in Minnesota and to secure cooperative action through the various agencies represented by its members. The first act of this Board was the creation of county administrative boards, consisting of 5 members which included the county health officer, county commissioners, and a physician to supervise the administration of the maternal and infant hygiene work in the counties, subject to the State and Federal laws and the regulations of the State Board of Health.

The most essential factor in the work of the Division is the cooperation of the physicians and the public health nurses of the State. Contact with the latter is secured and maintained through a superintendent of public health nursing and 3 field nurses working with the Division.

A series of 9 prenatal letters which have been adapted from those prepared by the United States Public Health Service, is being issued to expectant mothers. The first of these was sent out in February and to date (September 30) 1,075 have been mailed. A correspondence study course of 15 lessons has been prepared, which the Extension Division of the State University distributes through the regular channels. The course may be taken by any individual in the State free of charge, although there is a growing tendency for the organization of classes. Since the beginning of this course in February, 1,852 women have been enrolled.

The sterile obstetrical package, containing a minimum amount of material at an approximate cost of \$2, has also been prepared by the Division. After demonstrations throughout the State by the nurses, arrangements have been made for its sale, by groups of women, by the drug stores, or through the physicians. These packages are now available in 43 counties of the State.

A monthly news letter is circulated among public health nurses, physicians, and members of the county administration boards to stimulate uniformity of interest in the Sheppard-Towner act.

Outlines for a mothercraft course have been prepared and the necessary literature secured. The Division is at present working on a booklet for a course in mothercraft embodying infant and child feeding methods as taught in the Pediatric Department of the Medical School.

Demonstrations were held at 53 county fairs.

Infant feeding demonstrations were held in connection with the baby clinic program of the Minnesota Public Health Association. The Division plans to hold 4 regular monthly prenatal clinics in different parts of the State.

A survey of the midwife problem has been completed, a report of which is now being prepared.

Three public health nurses of Indian blood, capable of talking the Indian language, are to work among the 13,000 Indians within the State. The project will be financed by a gift from the American Child Health Association to match money available from Federal funds.

INFANT WELFARE SOCIETY OF MINNEAPOLIS

Organized 1910. Incorporated 1913.

Aim: To provide medical supervision and nursing care for expectant mothers who cannot afford this service. To teach mothers the importance of breast feeding; to educate mothers to keep their well babies under the supervision of a doctor; to

provide this supervision for mothers who cannot afford to pay for it. To teach mothers of children of pre-school age the proper feeding, environment and control of their children.

Board: The governing board consists of 8 men and 12 women, including the medical director of infant and pre-school work and the medical director of prenatal work.

Territory: The Society serves an urban territory with a population of 409,000.

Staff: Executive secretary. Doctors: 10 part-time. Nurses: 3 instructing, 14 staff. Clerical assistants: 2. Volunteer workers: 50. The students of the Home Economics Department of the University of Minnesota give part-time work in the pre-school department.

Type of work: Visits to the homes of all new-born babies within our districts to teach the importance of breast feeding, the value of regular medical supervision of the well baby and the necessity of a postpartum examination of the mother. Clinics for the well baby up to two years of age for those who cannot afford to pay for this service. Clinics and home follow-up work for prenatal patients and for children of pre-school age.

Financial: The total budget for the year 1922, \$37,786. The Society is a member of the Council of Social Agencies and is supported by the Community Fund.

General statement: The total attendance at clinics during the year 1922 was 19,073. 28,742 visits were made in the homes by the nurses.

THE VISITING NURSE ASSOCIATION OF MINNEAPOLIS

Organized: The Association began as a Committee of the Associated Charities in 1904, and became incorporated as a separate organization in 1917.

Aim: To give skilled nursing care to residents of Minneapolis who are sick in their homes and to teach personal hygiene, cleanliness, and prevention of disease.

Board: The Association is governed by a board of 6 men and 26 women.

Territory: Service is given the City of Minneapolis which has a population of 409,000.

Staff: Superintendent of the Association. Doctors: 9 advisory. Nurses: 1 assistant superintendent who is also supervisor of instruction, 1 registrar, 3 supervisors, 19 general nurses, 1 obstetrical nurse. Clerical: 1 bookkeeper, 3 clerical assistants. Volunteer workers: 63. The organization cooperates with three other agencies in supporting a generalized nursing experiment in one ward which consists of the following personnel: 1 supervisor; 4 staff nurses; 1 clerical assistant.

Type of work: Bedside nursing and supervisory visits in the home, to prenatal patients, to women at time of confinement, to postpartum and postnatal patients, to all types of medical and surgical conditions, to chronic sufferers and tuberculous patients in need of bedside nursing. The communicable disease service includes all but cases of erysipelas, smallpox, diphtheria and scarlet fever.

Financial: The total budget for the year was \$57,796.44, 85 per cent of which was received from the Community Fund, 12 per cent from patients in payment for services, 3 per cent from miscellaneous sources. The cost per visit is \$1 and free care is given when necessary.

General statement: The total visits made by the staff was 47,591; 6,235 patients were cared for. The nurses averaged 8.1 visits per day. Sixty-three children during the year attended a camp for children susceptible to tuberculosis.

Rochester

ST. MARY'S HOSPITAL

Founded in 1889 by the Sisters of St. Francis. It is connected with the Mayo Clinic.

In 1922 its field of service was expanded by the opening of the maternity department in July, and in September when the medical department opened with the transfer of patients from the Olmsted to St. Mary's Hospital. The new surgical pavilion was also completed in 1922 at a cost of two and one-fourth million dollars.

St. Paul

ST. PAUL BABY WELFARE ASSOCIATION

Organized August, 1910.

Aim: To improve the health conditions of the children of St. Paul through the education of the mothers.

Board: The Association is governed by a board of 4 men and 5 women.

Territory: The Association serves an urban territory with a population of 275,000.

Staff: Director of the Association. Doctors: 1 supervisor, 13 part-time. Nurses: 1 supervisor, 2 general supervising, 10 staff. Social service worker: 1. Clerical assistants: 2.

Type of work: Home visiting, clinics and health centers are maintained for prenatal and postnatal patients as well as for infants and pre-school children.

Financial: The total budget for the year was \$22,000. The Association is supported by the community chest and contributions.

General statement: The number of infants given home care during the year was 3,946; the number of home visits paid to infants and pre-school children was 6,091; the infant mortality rate was 12 per 1,000 among children under care of the Association.

MISSISSIPPI

Jackson

BUREAU OF CHILD WELFARE, STATE BOARD OF HEALTH

Organized July 1, 1920.

Aim: Maternity, infant, and child hygiene.

Board: The governing board consists of the State Board of Health.

Territory: Entire State with a population of 1,789,182, which is largely rural.

Staff: Director of Bureau, supervisor of maternity and infant hygiene, supervisor of nutrition, supervisor of oral hygiene, and unit physicians.

Type of work: Physical examination of infants, pre-school, and school children; follow-up work for the correction of defects found; organization of child welfare committees; lectures, health plays, and newspaper service; supervision of nutrition programs, supervision of midwives, demonstrations to mothers on the care and feeding of infants and children, supervisory care of women during prenatal, natal, and lying-in periods, and oral hygiene work.

Financial: The budget for the year was \$52,076.58 and is supported by Federal, State, and County appropriations.

General statement: A general physical examination has been given to more than 45,000 infants, pre-school, and school children. About 4,000 midwives have been investigated; permits issued when so indicated and intensive follow-up instructions given in group meetings and homes of the midwives. Instruction in nutrition has been given in the schools to groups of mothers and children, and educational lectures have been given to civic clubs, Parent-Teacher Associations. Oral hygiene work has been carried on by the supervisor working with the dentists, the field nurses, and school teachers.

MISSOURI

Columbia

MISSOURI STATE NURSES ASSOCIATION

Organized 1904.

Object: Furtherance of all means aiming to elevate the standard of the nursing profession.

Kansas City

CHILDREN'S BUREAU

Organized May, 1919.

Aim: Health education, prevention of illness, reduction of infant mortality.

Governing board: Consists of five men and nine women.

Territory: Serves an urban and rural territory with a population of approximately 400,000.

Staff: Consists of an executive secretary, assistant secretary, dietitian, and two field workers.

Type of work: Education of volunteer workers; yearly census and examination of pre-school children; follow-up of cases needing attention; and assistance to parents in obtaining medical care for their children by private physician, clinics or hospitals; keeping a careful clinical record of each child for the information of parents, board of health, or school board; promoting classes in home hygiene, prenatal care, nutrition of infants, and home nursing.

Financial: Budget for year amounted to \$12,000—received from the Charity Chest of the Chamber of Commerce.

General statement: The work is for children from birth to six years of age.

Statistics: Census 16,546. Examined 15,319. Children just entering school 3,420.

In Well Children's Stations Under Bureau Direction: Examinations 1,109. Consultations 2,090. Nurses visits 4,978.

Pre-School Mothers' Circles organized 6. Lessons 32. Aggregate attendance 484. Prenatal cases 109.

MINUTE CIRCLE-FRIENDLY HOUSE

Organized April, 1918.

Aim: Social service and clinic work.

Board: The governing board consists of 12 women.

Territory: The work covers the city, with an urban population of 10,000.

Staff: The staff consists of an executive, a medical director, 2 doctors (volunteer), 1 nursing director, 2 staff nurses, 1 dental director, 1 dentist, part time (volunteer), a social service director, 1 clerical assistant, and 5 volunteers.

Type of work: Home visiting, clinics, and health centers for prenatal, infancy and pre-school care. A dental clinic is also conducted.

Financial: The budget for the year amounted to \$6,000. The organization is supported by membership dues, community chest and a fee of 10 cents is charged for each dental treatment.

VISITING NURSE ASSOCIATION

Organized 1891.

Aim: To give skilled nursing care to patients in their own homes and to teach health and prevention of disease.

Board: The governing board consists of 20 women.

Territory: The Association serves the entire city with a population of 400,000.

Staff: The staff includes a superintendent; doctors: 2 part time (free service); nurses: 3 supervising, 42 staff; clerical assistants: 2.

Type of work: Home nursing care for maternal, prenatal, obstetrical, and post-natal cases, infants, pre-school children and adults. Clinics for colored babies.

Financial: The Association is supported by funds from the community chest, membership dues, fees from pay patients, the Metropolitan Life Insurance Company, and other organizations.

General statement: The Association conducts two child welfare clinics for colored babies. Clinic and follow-up work is done by six nurses for the Tuberculosis Society. The Association supplies nurses for all public health work done in the city

with the exception of school nursing. This includes nurses for the health work conducted by St. Luke's Child Welfare Club, Jewish Educational Institute, Minute Circle-Friendly House Association, Amberg Club, Children's Relief Society, Junior League, Children's Bureau, Swope Settlement, Whatsoever Circle, Institutional Church, Mexican Christian Nursing, and Italian Presbyterian Mission. A total of 106,440 visits were made last year among the sick and poor. 55,024 visits were made in connection with child welfare work.

St. Louis

BOARD OF RELIGIOUS ORGANIZATIONS

Organized 1916.

Civic and Social Service work—Betterment of St. Louis.

Board: A federation of Protestant and Jewish church groups forming twelve denominational units with a constituency of more than 25,000 women. The activities of the Board are directed through nine departments: Americanization, Child Welfare, Community Service or Neighborhood and Recreation, Family Welfare, Institutions, Protection and Delinquency, Publications, Social Hygiene, and Social Legislation.

Territory: The City of St. Louis and St. Louis County, are served by the Board.

Staff: Leaders trained in specific phases of social welfare.

Type of work: Child welfare department has mothercraft classes for study of child psychology and home problems, and organizes Mothers Clubs. Also furnish volunteer workers who serve lunches in the schools in the congested districts, and furnish speakers on child problems to Parent-Teachers Association and other groups.

General statement: Mothercraft, in the Board of Religious Organizations, emphasizes the moral and physical welfare of the child, and especially stresses the need for a religious atmosphere in the home.

MISSOURI SCHOOL OF SOCIAL ECONOMY PUBLIC HEALTH NURSING CENTER

Organized in 1918.

Aim: To train graduate nurses and senior hospital students for the public health nursing field.

Board: The Board of Regents of the University and Board of Directors of the South Side Health and Nursing Center form the governing body.

Territory: The territory covers the South Side district of St. Louis.

Type of work: The Teaching Center carries on the work of the Visiting Nurse Association including the Metropolitan Life Insurance nursing, and conducts the Municipal Clinics in this district. Instruction in principles of public health nursing, methods of family case work, community organization, child welfare and public speaking is given at the Missouri School of Social Economy. This year there has been added a full time instructor in nutrition and home making.

General statement: An eight months course is given. Approximately half the time is spent in field work. The demand for Public Health Nurses has been greater than the school could supply.

ST. LOUIS CHILDREN'S AID SOCIETY

Organized in 1909, incorporated in 1911.

Aim: To give individual care in free and boarding foster homes to partially-dependent normal children and to dependent delicate babies and older children presenting health and conduct problems; to find employment for unmarried mothers, enabling them to keep their babies; and to supply wage homes for older boys and girls.

Board: The governing board consists of a board of directors and an executive committee.

Territory: Cares for St. Louis children, and cooperates with hospitals in emergency out-of-town cases.

Staff: General secretary; office secretary; director of investigation and two workers; director of supervision and three workers; trained nurse; home-finding department with two workers; one stenographer; occasional volunteers from the Missouri School of Social Economy.

Type of work: Careful supervision in foster homes; preventive health work and infant care.

Financial: Since January, 1923, support has been supplied by the community fund.

General statement: The medical work (treatment of visual, dental, mental, orthopedic, and venereal disease) is accomplished through the Washington University Dispensary, and the dental work through the St. Louis University Dental Clinic. Hospital care is given by St. Louis Children's Hospital and occasionally by the Municipal Hospitals.

Number of children handled, August, 1922-23, 1,349.

Number of visits made, August, 1922-23, 9,757.

ST. LOUIS CHILDREN'S HOSPITAL

Organized 1879.

Aim: To maintain an institution, non-sectarian in its management and its benefaction, for the treatment of children from birth to 14 years, inclusive.

Board: The executive board consists of 20 women. Board of Managers about 200 women.

Territory: The Hospital serves the entire City of St. Louis.

Staff: Administrator of hospital. Doctors: 1 director, 3 full time, 45 volunteer. Nurses: 1 director, 3 supervising, 5 staff, 30 pupil. Dentists: 1 supervisor, 2 dentists. Social service works: 1 supervisor, 7 full time. Clerical assistants: 5.

Type of work: Hospital care is offered for dental, medical, contagious, general surgery, orthopedic, and venereal disease patients. There is also an occupational therapy department.

Financial: The Hospital is supported by endowment, membership dues, private subscriptions, and the community fund. Hospital fees are adjusted for each case.

General statement: The Hospital aims to eliminate disease and physical defects from the community by: 1. Curing children of their diseases and defects preferably in their homes, holding parents jointly responsible; or, when cure is not possible there, caring for them in the wards of the hospital. 2. Finding the causes of their diseases and defects and in cooperation with civic, social and religious agencies educating their families to avoid such causes in future.

ST. LOUIS PEDIATRIC SOCIETY

Organized November 22, 1885.

Aim: To promote the art and science of pediatrics, to stimulate the interest of the profession in this special branch of medicine, to spread the knowledge of public and private hygiene in so far as it affects the welfare of children.

Territory: The Society serves an urban territory with a population of 1,000,000.

Type of work: The Society, as an organization, does no welfare work, but its individual members work through the other organizations in the community.

NEBRASKA

Lincoln

EXTENSION SERVICE, COLLEGE OF AGRICULTURE

Incorporated 1919.

Aim: The object of the organization is rural extension work.

Board: The governing board of the Agricultural Experiment Station of Nebraska directs the Extension Service.

Territory: A rural territory with a population of 600,000 is served.

Staff: Work handled by the Home Hygiene and Health State Extension Agent.

Type of work: Home health has been promoted through women's meetings and talks before schools. In counties, training schools on the Home Care of the Sick have been held in which two delegates from each of the organized groups of women in the county have come to a central place for a two-day school. These women hold follow-up schools in their local communities, and in six weeks' time return for a second training school which is followed in six weeks by a third two-day training school. Beside the training schools, work has been given in health habits for boys and girls. Keep-well boys' and girls' clubs were also a part of the program. During Boys' and Girls' Club week, special work was given on health habits and assistance was also given in the physical examination contest for boys and girls at the State Fair.

Financial statement: The Extension Service is supported by the State and Federal governments.

General statement: Training schools on home care of the sick have proved popular during the year. One county sent a woman's demonstration team to the Inter-state Fair where they gave a 35 minute demonstration on what they had gained at the training schools. They also had a booth which showed many of the simple devices suggested in the training school.

Omaha

THE VISITING NURSE ASSOCIATION OF OMAHA

Organized 1896.

Aim: To give skilled nursing care to the sick in their homes; to teach personal hygiene, cleanliness, and the prevention of disease.

Board: The Association is governed by a Board of Directors consisting of 30 women.

Territory: The Association serves both rural and urban territory with a combined population of 200,000.

Staff: Superintendent, 2 supervisors, 22 nurses, 3 student nurses, 2 clerical assistants, 4 doctors, part time (volunteer), 12 Junior League part time volunteer workers.

Type of work: Bedside nursing, prenatal, delivery, postnatal nursing, infant welfare, tuberculosis, industrial, and orthopedic.

Financial: The total budget amounted to \$40,658.95. The organization is supported by special contributions, income from endowments, membership dues, receipts from patients and Metropolitan Life Insurance, and an annual tag day. The salary of 3 nurses is paid as follows: 1 by the city, 1 by Nebraska Tuberculosis Association, and 1 by the American Smelting & Refining Company.

General statement: Prenatal: The Association cooperates with the University of Nebraska and Creighton Medical clinics. Prenatal instruction given to 985 expectant mothers. Average number of months under care, three. A complete maternity program at the time of confinement; 4,474 visits were made in the homes; 186 deliveries. Average time spent on deliveries, 3 hours and 50 minutes. Maternal death rate 1; 4 stillborn, 1 baby died at birth.

Infant welfare: Education of mothers in care of infants by conferences with physician and home visiting by the nurse. Breast feeding is encouraged; formulae demonstrated; 15,071 home visits were made on 1,401 babies; 7 weekly conferences held; attendance 5,473. Little Mothers Clubs teach little girls in groups of ten, health and care of the baby.

Tuberculosis service: Functions through the clinics at the University and Creighton Medical Schools. Besides the active cases, 1,200 contacts are under supervision.

Social work and health teaching is carried on in each division of work.

NEW HAMPSHIRE

Manchester

MANCHESTER HEALTH DEPARTMENT

Organized 1885.

Aim: To administer health laws, to institute and administer measures for the preservation of public life, and to conduct the Isolation Hospital.

Board: The governing board is composed of 3 men.

Territory: An urban territory with an estimated population of 85,000 is served.

Staff: Health officer who is also superintendent of the Isolation Hospital; 2 clerks; 2 sanitary inspectors; 1 milk inspector; 1 market inspector; 1 slaughter inspector; 3 school physicians, part time; 6 school nurses; 5 infant welfare nurses; 2 school dentists, part time; 2 dentists' assistants. At the Isolation Hospital, superintendent; 1 resident physician, who is also the bacteriologist; superintendent of nurses; 3 nurses (other nurses engaged when number of patients so requires); and other necessary employees. All are full-time unless otherwise indicated.

Type of work: General health administration such as would be required in any city: sanitary, tenement, barber shop, ice cream factory, candy factory, store, food, milk, slaughterhouse, boarding house, meats, meat products inspections; physical examinations of school children; dental examinations and treatments of school children; control of communicable diseases; Schick test and toxin-antitoxin treatments; both chemical and bacteriological examinations of milk; treatment of communicable diseases; tuberculosis clinic for advice and treatment; venereal disease clinic for advice and treatment; 3 infant welfare clinics for prenatal and infant care and home visiting for children up to two years of age.

Financial: The estimated budget for the year 1923 was \$73,573.10. The amount allowed was \$65,000.

General statement for 1922: Infant Welfare Department—3,119 babies under supervision; 15,864 home visits made; clinics held, 257; visits to stations, 4,842; Isolation Hospital—192 patients treated. Venereal disease clinic, 505 patients treated; 6,780 treatments given. Tuberculosis clinic—47 clinics; 722 patients; 1,650 home visits. School Medical Inspection service—5,432 children examined. School, Dental service—5,046 children examined; 2,807 treatments given. March 9, 1922, the Board of Health passed and May 16 the Board of Mayor and Aldermen approved regulations governing slaughtering inspection and sale of meats and meat products in this city. Manchester has the distinction of being the only community in New Hampshire where slaughter inspection is maintained. This service has eliminated from the market undesirable meats and meat products.

Early in 1922, a study of the methods of preparing milk for sale to the consumer was begun. The tests made were chemical and bacteriological. The direct result of this work has been a most noticeable improvement in the quality of milk sold. New regulations governing production and sale have been passed and improved.

NEW JERSEY

Atlantic City

ATLANTIC CITY DAY NURSERY

Organized 1906.

Aim: To receive and care for during the day the young children of poor, industrious women whose employment calls them from their homes and who would otherwise be obliged to leave their children entirely without protection.

Board: The governing board consists of 5 men and 22 women.

Territory: Serves an urban Territory.

Staff: The staff consists of a director, and medical director (volunteer service).

Financial: The total budget for the year amounted to \$2,583.03. The organization is supported by voluntary contributions, membership dues, appropriations from city and contributions from members. A fee of from five to ten cents a day per child is charged.

General statement: The Day Nursery is conducted under the auspices of the Atlantic City Branch of the Mother's Congress, incorporated to maintain a white and colored day nursery.

CHILD FEDERATION OF ATLANTIC CITY

Organized May 5, 1916.

Aim: To actively advance the best interests of the babies and children of Atlantic City; to safeguard their moral, mental and physical health.

Board: The governing board is composed of 3 men and 17 women.

Territory: The Federation serves an urban territory with a population of approximately 50,682.

Staff: One chief nurse doing field work; child hygiene teacher; 1 nurse, full time 4 months, part-time throughout year as necessary (prospects for full-time in near future); 1 supervising physician; 2 volunteer physicians in clinic, with prospect of 1 and perhaps 2 more during the present year. Volunteer workers, in clinic, 4 to 6 as needed.

Type of work: Home visiting and clinics for prenatal and postnatal patients as well as for babies and pre-school children are conducted. Preventive and educational work are features of the service rendered.

Financial: The total budget for the year is \$2,500. The Federation is supported by membership dues, appropriations, contributions, also by card parties and lawn fêtes.

General statement: Supervised by New Jersey State Child Hygiene Division, and carrying full program of that department. During the year 3,217 visits were made as follows: expectant mothers—573, babies under 1 year—2,199, children of pre-school age—445, visits to consultation station—1,651 babies, 411 pre-school children, 45 expectant mothers.

Newark

THE BABIES' HOSPITAL

Organized May, 1896.

Aim: Care and feeding of children.

Board: The Hospital is governed by a Board of 16 men directors and a board of 60 women managers.

Territory: The entire state receives service.

Staff: Medical staff: medical director, 8 attending physicians, 9 associate physicians, 6 attending surgeons, 3 associate surgeons. Nursing staff of hospital: superintendent, 2 supervising nurses, 12 student nurses. Social service department: 2 visiting nurses, 1 milk dispensary nurse, 1 clerical worker.

Type of work: Hospital and clinic care for sick infants, consultation and home visiting for preventive and educational work.

Financial: The total budget amounted to \$32,967.84. The Hospital is supported by appropriation from the city, subscriptions and contribution from governing boards, contributions and board receipts from pay patients.

General statement: During the year 462 patients were admitted to the hospital, 10,455 hospital days treatment, 923 patients at clinics, 3,246 cases at consultations, 2,091 home visits, 11,647 feedings dispensed.

Orange

DIET KITCHEN OF THE ORANGES

Organized 1904.

Aim: Supervision and instruction in the care and feeding of babies and pre-school children, and the dispensing of pure milk to babies, undernourished children, the sick and the tuberculous.

Board: The governing board consists of 14 women.

Territory: An urban territory is covered.

Staff: Nurses: 3 who act as supervisors and field workers; doctors: 3 full time; social worker: 1.

Type of work: Home visiting, clinics, and health centers are maintained particularly for infants and children of pre-school age.

Financial: The budget for the year was \$28,803. The organization is supported by the Welfare Federation of the Oranges, membership dues and special contributions. It is about 81 per cent self-supporting.

General statement: During the year the nurses made 6,035 visits. A very important branch of the work is the milk distribution, 172,995 quarts of milk were dispensed in 1922. Grade "A" pasteurized bottled milk is delivered to the homes of the babies or may be obtained at one of the weighing stations. The patients pay 80 per cent of the cost. We also supply 5 public schools with milk. The children obtain it at the recess hour and pay four cents per cup or five cents for one-half pint bottle.

VISITING NURSE ASSOCIATION OF PLAINFIELD AND NORTH PLAINFIELD

Organized July 1, 1911.

Aim: To provide trained nurses for all home nursing (other than full time private nursing) in and about Plainfield, school nursing, and instructive health work.

Board: The governing board consists of 3 men and 16 women.

Territory: The Association serves an urban and rural territory with a combined population of 50,000.

Staff: The staff consists of an executive secretary; doctors: 5 part time volunteer (at baby stations); nurses: 8 staff; social workers: 5 part time volunteer (at baby stations); nutritionists: 2 of the nurses, part time.

Type of work: Home nursing care for all ages including maternal, prenatal, obstetrical, visual, mental, cardiac, orthopedic, industrial, tuberculosis and venereal disease cases; baby health stations, school nursing and nutrition classes.

Financial: The amount of the budget for the year was \$21,416. The Association is supported by community chest, appropriations, and contributions.

General statement: During the year 7,491 nursing visits were made, 4,087 instructive and other visits, 2,111 to the homes of school children. Total attendance of infants and pre-school children at the well-baby clinics, 2,047.

NEW YORK

Albany

NEW YORK STATE DEPARTMENT OF HEALTH, DIVISION OF MATERNITY, INFANCY AND CHILD HYGIENE

Organized 1914.

Aim: To safeguard motherhood and protect the health of infants and children.

Territory: The Division serves the entire State with an urban population of 2,604,614 and a rural population of 2,158,159.

Staff: Doctors: 6, 18 part-time. Nurses: 1 supervisor, 30 special. Nutritionists: 1. Clerical assistants: 10.

Type of work: Consultation service for organizing child hygiene work; consultant nursing service, to assist and advise local nurses; prenatal service for instruc-

tion and consultation; surveys and studies of local health conditions pertaining to maternity, infancy and child health and investigation of puerperal deaths; organization service for stimulating a community to assist in child hygiene work; plans for women's organizations in extending the health work of their committees; extension courses for nurses, comprising lectures and demonstrations in maternity hygiene; nutrition service for instruction of nurses and mothers and for nutrition extension in children's institutions; publicity including the preparation and distribution of literature, films, talks by radio, addresses, and press notices; cooperation with other organizations in breast feeding demonstrations; licensing and supervision of midwives, boarding homes and maternity hospitals, also orthopedic consultations for aftercare of poliomyelitis; rural traveling child health consultations; supervision and advice to mother and child hygiene stations.

Financial: The total budget for the year amounted to \$287,000 and is supported by a State appropriation.

General statement: The policy of the State Department of Health through the Division of Infancy and Maternity Hygiene is to stimulate local communities to extend or to organize maternity and child hygiene activities through their own local organization and to give such assistance as is possible to these localities in working for mothers and children; regional consultants who are recognized leaders in obstetrics and pediatrics in the State assist in securing the cooperation of the medical profession.

STATE BOARD OF CHARITIES

Organized in 1867, became Constitutional body January 1, 1895.

Aim: The principal duties of the Board are to visit, inspect, and maintain a general supervision of all institutions, societies or associations which are of a charitable, eleemosynary, or correctional character, whether State or municipal, incorporated or unincorporated, made subject to its supervision by the Constitution and the statutes of the State. Other duties are to establish rules for the reception and retention of inmates, to approve or disapprove the organization and incorporation of all the institutions which are or may become subject to the supervision of the Board; to license dispensaries; supervise the placing out of dependent children; secure the just, humane, and economic administration of all institutions subject to its supervision; advise the officers of such institutions in the performance of their official duties; aid in securing the erection of suitable buildings for the accommodation of inmates in such institutions; aid in securing the best sanitary condition of the buildings and grounds of all such institutions, and advise measures for the protection and preservation of the health of the inmates; aid in securing the establishment and maintenance of such industrial, educational and moral training in institutions having the care of children as is best suited for inmates; investigate the condition of the poor seeking public aid and advise measures for their relief; administer the laws providing for the care, support and removal of State, non-resident, and alien poor, and the support of Indian poor persons; collect statistical information in respect to the property, receipts and expenditures of all institutions, societies and associations subject to its supervision, and the number and condition of the inmates thereof, as also of the poor seeking temporary public relief.

Board: The governing board consists of 8 men and 4 women.

Territory: The entire State is served with a population of 11,000,000.

Financial: The total budget for the year amounted to \$188,262 and is furnished by the State.

Brooklyn

BROOKLYN CHAPTER, AMERICAN RED CROSS

Organized 1905.

Aim: To relieve distress.

Board: The governing board consists of 10 men and 6 women.

Territory: The entire city is served with a population of 2,000,000.

Type of work: The Home Service Section does social work for the ex-service man and his family and covered 9,000 cases during the past year. The educational department teaches home hygiene and care of the sick, first aid, and nutrition. 1,247 pupils have been taught home hygiene in 78 classes; 1,785 pupils have been taught first aid in 55 classes and the nutrition center has taught 239 pupils in 14 classes. The making of books for the blind by the Braille system has also been taken up by the educational department. The Health Speakers Bureau acts as a clearing house between speakers and audiences desiring information on health subjects. 652 audiences were addressed on health topics by trained specialists. The Health Information Bureau is also a clearing house for health information inquiries. The production and surgical dressings department supervises the making of garments and surgical dressings by auxiliaries, the Junior Red Cross, voluntary organizations and individuals. The Disaster Relief Committee furnished aid in 9 disasters.

Financial: The total amount of the budget was \$112,322.56 and is supported by voluntary contributions, membership dues.

General statement: The various departments of this chapter cooperate with agencies engaged in work along the same lines.

MATERNITY CENTER ASSOCIATION OF THE BOROUGH OF BROOKLYN

Organized August, 1918.

Aim: The Association aims to teach the public the vital importance of adequate maternity care, and to secure in cooperation with all existing agencies such care for the women of Brooklyn.

Board: The Association is under the joint control of the medical advisory board, consisting of 4 men; and the board of directors, consisting of 47 women.

Territory: The Association serves an urban territory.

Staff: Doctors: 2 part-time. Nurses: 1 supervisor, 1 supervising, 4 staff
Clerical assistant: 1. Volunteer worker: 1.

Type of work: Home visiting and clinics are conducted for prenatal and post-natal patients. Classes are held for prenatal patients and preventive and educational work is carried on.

Financial: The budget for the year was \$12,000. The Association is supported by the "Center Shop" (a sport shop for women and children) and membership dues.

General statement: During the year 2,224 patients visited the clinic and 5,328 home visits were paid by the nurses and doctors.

Canaan

BERKSHIRE INDUSTRIAL FARM

Organized 1886.

Aim: To save wayward boys.

Board: The governing board consists of 10 men.

Staff: The staff consists of an executive. Doctors: 1 director of medical service, 1 part-time. Nurses: 1 director, 1 supervising. Dentists: 1 director, 1 part-time, 2 volunteer oral hygienists. Nutritionists: 1 director, 1 full-time. Clerical assistants: 1.

Type of work: Care and training of boys entrusted to the institution. Academic, trade, and agricultural courses are given. The health work and mental hygiene are under the direction of a physician and psychiatrist. Dental defects corrected and regular prophylaxis treatments given. Orthopedic conditions treated and corrected. Special attention is given to nutrition and the boys are weighed every month.

Financial: The total budget for the year amounted to \$75,000 and is supported by educational grants and contributions. A charge of \$6 per week per boy is minimum cost.

Jamestown

JAMESTOWN VISITING NURSE ASSOCIATION

Organized January 6, 1909.

Aim: The prevention of disease, health education, and bedside nursing of the sick at home.

Board: The governing board consists of 6 men and 7 women.

Territory: An urban territory with a population of approximately 38,917 is served.

Staff: Doctors: 1 supervisor, 6 volunteers. Nurses: 1 director, 1 supervising, 3 staff. Clerical assistant: 1.

Type of work: Bedside nursing to all the sick; clinics for prenatal patients, infants and children; health center for infants, little mothers' league classes.

Financial: The budget for the year is \$7,390.96. The Association is supported by the community chest, appropriations and donations. Fees are regulated for each patient.

General statement: The Association made a survey of all crippled children in the city for the Rotary Club and has given special exercises to these children, supervised by the State Nurse Orthopedic Department.

New York City

THE BABIES' HOSPITAL OF THE CITY OF NEW YORK

Organized 1887.

Aim: To provide medical and surgical aid and nursing for sick and convalescent babies.

Board: The governing board consists of 12 men and 3 women.

Territory: The Hospital serves an urban territory.

Staff: The staff consists of a superintendent. Doctors: 1 director, 1 full-time and 3 internes. Nurses: 1 director, 1 supervising, 4 staff. Social workers: 1 director, 2 full-time. Nutritionists: 1 full-time, 3 students, 1 infant's nurse. Clerical assistants: 4.

Type of work: Hospital care and clinics for infants, home visiting to follow-up hospital care and to instruct mothers; training school for infants; nurses and post-graduate courses for graduate nurses; lectures to fourth year students of College of Physicians and Surgeons and research work.

Financial: The total budget for the year amounted to \$94,383.63 and is supported by appropriations from the city, contributions and endowment fund. The hospital fee is from \$3 to \$7 per week for board; dispensary 25 to 50 cents (50 cents first visit, 25 cents succeeding visits).

General statement: During the year 4,882 patients visited the clinic, 3,079 home visits were paid; 1,645 patients were given home care and 1,755 patients given hospital care.

JOHN E. BERWIND MATERNITY CLINIC

Organized 1901.

Aim: To deliver poor women in their own homes and to hold prenatal clinics and instruction in care of babies during the first year of life.

Board: The governing board consists of 5 men.

Territory: The clinic serves the City of New York.

Staff: Doctors: 4 resident, 4 attending and 2 consultants, 6 students.

Type of work: Maternity and pediatrics.

Financial: The clinic is supported by Mr. Berwind. A small fee is asked of those who can afford to pay for the cotton and gauze used.

CHILDREN'S WELFARE FEDERATION

Organized June, 1912.

Aim: To reduce morbidity and mortality of infants and children; to promote their physical, mental and social welfare by acting as a clearing house for information regarding welfare work for children and fostering practical cooperation among all the forces in the field in order that duplication of effort may be avoided and each society in the Federation may become more effective.

Board: The governing board consists of 21 men and 9 women.

Territory: The Federation serves the city with a population of 6,000,000.

Staff: One trained nurse supervising work of maternity clearing house and mother's milk experiment; 1 trained social case worker in charge of clearing house for children's cases; 2 trained investigators in charge of information service and special surveys; 1 office manager; 3 clerks; 1 practical nurse in charge of the Bureau for collection and sale of mother's milk. Stenographic service furnished by the Department of Health.

Financial: The total budget for the year amounted to \$22,270 and is supported by membership dues, appropriations, contributions and special appeals.

CHILD WELFARE LEAGUE OF AMERICA

Organized 1921.

Aim: 1. Securing a better understanding of child welfare problems and of the means of their solution.

2. Development of better standards and methods in different forms of work with children, first among its members, and then in the country at large.

3. Intensive study of certain fields of children's work, making available the results of such study and of other valuable investigations in these fields.

4. Assisting groups of citizens to plan their work for children so as to bring the largest measure of good returns.

Board: The governing board consists of 14 men and 8 women.

Territory: The League serves the United States and Canada.

Type of work: 1. Field service, without intensive study, for making constructive criticism, suggesting extension of service or additional personnel, coordination with other work in the community, and interpretation of new developments in work with children.

2. Studies of single agencies, to suggest improvements within the agency or better alignment with the needs of the community.

3. Community planning in children's work through Councils of Social Agencies or Financial Federations or Chests to meet community needs.

4. Assistance to non-social service groups, such as fraternal orders, civic clubs, religious bodies, or other groups of citizens who wish to undertake work with children.

5. Inter-society service in the exchange of case work, and of publicity and financial plans.

6. International exchange in case work with agencies in the principal European countries.

7. Country-wide information and correspondence service on the status and needs of child welfare work in the various states and cities.

8. Loan library, for members, of carefully selected books and pamphlets on child welfare.

9. Publication of a monthly bulletin, and valuable articles in occasional bulletins, free to members, at cost to others.

Financial: The total estimated budget for the current year is \$30,000. The League is supported by an appropriation from the Commonwealth Fund, by membership dues, and by payments for certain services.

General statement: The membership of the League includes 98 agencies representing private societies which place children in foster homes free, at board, or for adoption; children's protective agencies, public departments of child care, and other classes of child welfare agencies.

FEDERATION FOR CHILD STUDY

Aim: The aim of the Play School Committee is two-fold:

1. To provide a well founded all day play and health program for the children who are left in the city during the summer vacation.
2. To make a lasting contact with the home and the mother.

Type of work: The aim is carried out as follows:

1. (a) Play—Outings, swimming, games, dancing, dramatics, music story, and library period, show work, cobbling, printing, sewing, cooking, arts and crafts, nature study.
(b) Health—Daily scoring in cleanliness, effort, courtesy, and improvement; showers, lunch, afternoon nap; scheduled classes for hygiene and health instruction.
(c) Canteen—In charge of expert dietitians, to provide and teach the essentials of an adequate hot luncheon.
2. (a) Articles made in the Play Schools carry messages of good taste and cleanliness into the home.
(b) Home visitor goes into the home for personal talks and gets consent for remedial work, or to follow up absentees.
(c) Mothers' Days observed in each school at which the mothers are given simple talks on nutrition and other phases of child life.
(d) Mothers Clubs on Mothers' Days and carried throughout the winter with speakers from the Extension Bureau of the Federation for Child Study.

HENRY STREET VISITING NURSE SERVICE

Organized 1893.

Aim: To give trained nursing service to the sick in their homes; instruction in personal hygiene, sanitation and the prevention of disease; and to solve related social and economic problems.

Board: The governing board consists of 9 men and 4 women.

Territory: An urban territory with a population of 5,621,151 is served.

Staff: Director of medical service. Nurses: 1 administrator, 1 general director, 1 associate director, 1 educational director, 3 field directors, 27 supervising, 192 staff and student. Statistician: 1. Social workers: 2. Clerical assistants: 20.

Type of work: Home visiting, clinics, classes, and health centers are maintained, particularly, for mothers and children. Educational and preventive work are given special attention. Cardiac cases receive care, and all ages are served.

Financial: The total budget was \$375,000. The organization is supported by contributions, returns from nursing service, and income from investments. Fees are adjusted to family circumstances.

General statement: During the year 1922, 386,280 visits were made by the nurses; 51,119 patients were given care.

HOSPITAL SOCIAL SERVICE ASSOCIATION OF NEW YORK CITY, INC.

Organized 1912.

Aim: To stimulate the growth of social work in hospitals and dispensaries, and to standardize such work; to organize experimental social service work and to collect and correlate information in regard thereto; to hold public meetings and to disseminate information through publications and otherwise in regard to hospital social service.

Board: The governing board consists of 11 men and 3 women.

Financial statement: The total budget for the year was \$10,000 and is supported by voluntary contributions, membership dues and magazine subscriptions.

THE JACOBI SOCIAL SERVICE, LENOX HILL HOSPITAL

Organized May 1, 1918.

Aim: The after care and health education of children who have been patients in the hospital and clinics, also the care of other members of the family.

Board: The governing board consists of the head of the pediatric division, his staff of three physicians, a treasurer and counsel and ten women.

Territory: The neighborhood immediately surrounding the hospital.

Staff: The staff consists of 1 director, 3 full time workers, and 1 half time worker (all nurses), 7 clinic volunteers, and 5 volunteer clerical assistants.

Type of work: General medical social service, including home visiting, clinics, and health centers. Special care is given to cardiac and potential cardiac cases, malnutrition cases, and cases requiring correctional exercise work. The work is both preventive and educational.

Financial: The budget for the year 1922 was \$6,612.48. In addition to this \$2,250 in salaries is paid by the Cardiac Association of Public Education for 1 full time and 1 part time worker. The organization is supported by membership dues, contributions, rummage sales.

General statement: The social service department has also under its care three cardiac public school classes situated in the nearby settlement house, and is now planning an evening combination club-clinic for its graduates and those children of the cardiac clinic who are at work and cannot attend the afternoon clinics.

JEWISH BOARD OF GUARDIANS

Organized 1902.

Aim: A coordinated effort for the prevention and correctional treatment of delinquency among Jews, juvenile, adult, male, and female.

Board: The governing board consists of 7 men and 3 women.

Territory: The Board serves an urban population of 3,600.

Staff: The staff consists of an executive director. Doctors: 1 part-time, 2 volunteers; social workers: 1 director, 39 full-time, 2 full-time volunteers; clerical assistants: 19; volunteers 302.

Type of work: The work of the Board is carried on by three committees: the committee on Hawthorne and Cedar Knolls Schools for the education and training of boys and girls; committee on outside activities through the preventive, after-care, parole and unmarried mothers departments and the Big Brother and Big Sister groups; the committee on Lakeview home which provides shelter for the unmarried mother and her child and trains the mothers to earn a livelihood.

Financial: The total budget for the year amounted to \$110,889.63 and is supported by the Federation of Jewish Philanthropies.

JUDSON HEALTH CENTER

Organized January 12, 1921.

Aim: The Judson Health Center is an independently incorporated organization, working without regard to creed or color, devoting itself to health education, and health problems, both preventive and curative.

Board: The governing board consists of 30 members, men and women.

Territory: The territory covered is urban with a population of approximately 45,000.

Staff: Volunteer staff: 1 general director, 15 doctors, 4 consulting doctors, 4 aids. Paid staff: 1 assistant general director, 1 supervisor of nursing, 10 registered nurses, 1 supervisor of nutrition, 3 dietitians, 1 supervisor of social investigations, 3 Italian interpreters and visitors, 1 supervisor of dentistry, 4 dentists, part time, 1 oral hygienist, 1 physio-therapist (supported by the New York Rotary Club), 1 registrar, 1 assistant registrar, 2 pages, 5 clerical workers, 1 nursery-school teacher, 1 Italian interpreter and teacher, 4 nursery assistants.

Type of work: Maintains diagnostic and nutrition clinics for infants and children; general medical clinics for men, women and children; prenatal and gynecological clinics; orthopedic, skin, and eye, ear, nose and throat clinics; dental and oral hygiene clinics; conducts cooking and nutrition classes for mothers and children; sends registered nurses and graduate dietitians or Italian visitors into the homes for instruction and follow-up care; operates two health nurseries with a roof playground, for a selected number of malnourished and rachitic infants and pre-school children, giving them special care with sunshine and correct diet. Their mothers are given group instruction in child care.

Financial: The total budget for the year was \$91,000. The Center is supported by membership dues, contributions, and fees.

General statement: Several factors influence the work. The population is almost entirely Italian. There are only two other health agencies in the district, one a baby feeding station and the other a tuberculosis clinic. The baby death rate in the 1920 census was 95 as compared with 85 for city at large. Treatment paves the way for education in preventive measures. The district is badly congested and the tenements are in bad condition.

MATERNITY CENTER ASSOCIATION

Organized April, 1918.

Aim: To teach the public the vital importance of adequate maternity care, and to secure in cooperation with all existing agencies—such care for all expectant mothers.

Board: The governing board consists of 5 men and 41 women.

Territory: An urban territory with an approximate population of 160,000 is served.

Staff: General director. Doctors: chairman of medical advisory board, 2 part-time. Nursing: director of field service, associate director, 20 staff, 6 clerical. Number of volunteer workers varies.

Type of work: Home visiting, clinics, classes and health centers are maintained for maternal, prenatal and postnatal patients as well as for infants. The Association acts as an educational center for the entire country in popularizing the need for prenatal care and in demonstrating the possibilities of life-saving through intensive prenatal work.

Financial: The total budget for the year was \$79,164.50. The Association is supported by voluntary contributions. Fees are adjusted to family circumstances.

MULBERRY COMMUNITY HOUSE

Organized June 2, 1920.

Aim: To democratically direct the social, civic and recreational activities of the people, mostly Italian, living in this densely populated district.

Board: The governing board consists of 12 men and 3 women.

Staff: The staff consists of 8 full-time workers, and 2 part-time workers. The average number of volunteers a month is 25.

Type of work: The social and recreational group work includes social clubs, gymnasium, entertainments, classes for children and adults, country outings, dramatics for adults and children, civic education which includes English classes for men and women, citizenship training classes, group work along civic and health lines with mothers, men, working girls and boys and a host of unorganized ministries which spring up spontaneously to supply a quick but transient need.

General statement: Total enrollment for the 98 different house activities which we had during the year, 4,191. Total number of meetings, 3,377; days of country outings which we provided during July and August, 2,403; visits to the tenements in the district made by our workers, 2,679. Total circulation of our library, 9,823; library was opened 115 days during the year. Largest monthly attendance at Mulberry Community House, 9,696. Annual attendance at Mulberry Community House, 87,722.

NATIONAL CHILD LABOR COMMITTEE

Organized 1904.

Aim: To promote the interests of children; to investigate and report facts concerning child labor; to raise the standards of public opinion and parental responsibility with respect to the employment of children; to assist in protecting children by suitable legislation against premature or otherwise injurious employment, and thus aid in securing for them an opportunity for elementary education and physical development sufficient for demands of citizenship and requirements of industrial efficiency; to aid in enforcement of laws relating to child labor.

Board: The governing board consists of 20 men and 5 women.

Territory: The work of the Committee is national in scope.

Financial: The total budget for the year amounted to \$100,000 and the Committee is supported by memberships and contributions.

NATIONAL FEDERATION OF DAY NURSERIES

Organized April, 1898.

Aim: To unite in one central body all day nurseries, and to endeavor to secure the highest attainable standard of merit.

Board: The governing board consists of 16 women.

Territory: The scope of the organization is national and covers every city where there is a day nursery.

Staff: Executive secretary and clerical assistants compose the staff.

Type of work: The territory is divided into seven subdivisions, each with a center. To the chairman of each center is delegated the responsibility of keeping the nurseries in their district up to the standard. The work emphasizes care for health and dietary, educational experiments are also carried on. The work is primarily with the pre-school child.

Financial: The budget for the year was \$1,000. The organization is supported by dues and personal contributions.

NATIONAL CHILD WELFARE ASSOCIATION, INC.

Organized 1912. Incorporated 1914.

Aim: So to educate children, parents and public, as to promote bodily health, mental effectiveness, and moral power in the children of America.

Board: The Association is governed by a board of 10 men and 4 women.

Territory: The work of the Association is national in scope.

Staff: General secretary, assistant treasurer, research secretary, director of educational service bureau, extension secretary, associate extension secretary, and clerical assistants.

Type of work: The Association originates and distributes at cost educational posters, pictures, lantern slides and other graphic material, also pamphlets and books for use by organizations and individuals engaged in child welfare work. It likewise supplies expert advice, exhibits, speakers and organizers on all phases of child welfare.

Financial: The Association is supported in part by money received from the distribution of material and in part by private contributions and membership dues.

NATIONAL LEAGUE OF NURSING EDUCATION

Organized 1893.

Aim: To consider all questions relating to nursing education; to define and maintain in schools of nursing throughout the country minimum standards for admission and graduation; to assist in furthering all matters pertaining to public health; to aid in all measures for public good by cooperating with other bodies, educational, philanthropic and social; to promote by meetings, papers and discussions, cordial professional relations and fellowship and in all ways to develop and maintain the highest ideals in the nursing profession.

Board: The governing board consists of 15 women.

Type of work: Educational by putting into operation those measures included under "Aim." Its headquarters, 370 Seventh Avenue, New York City, acts as a distributing center of advice upon all matters relating to nursing education. In addition a Placement Bureau is maintained at headquarters. This Bureau represents an important activity of the League in that it forms a medium of exchange for positions between schools of nursing, hospitals and nurses.

Financial: The National League of Nursing Education is supported by membership dues and contributions from individuals and organizations.

General statement: Whatever has been accomplished in this country for the progress of nursing education has been largely through the efforts of the National League of Nursing Education and its representative state organizations. Its history covers definite achievements in the making of nursing a profession built upon scientific preparation and a vocation of community usefulness.

NATIONAL TUBERCULOSIS ASSOCIATION

Organized 1904.

Aim: The Association was organized for the study and prevention of tuberculosis.

Board: The governing board consists of 95 men and 5 women.

Territory: The work of the Association covers the entire United States. There are 48 constituent state associations and approximately 1,400 local associations.

Staff: The members of the staff under 44.

Type of work: The work of the Association is divided into the following lines of work: administrative, field, Modern Health Crusade, medical, seal sale, publicity and publications, statistical.

Financial: The Association is supported by membership dues, donations, and 5 per cent of the gross sale of Tuberculosis Christmas Seals, the 95 per cent remaining with the state and local associations.

General statement: The year 1922-23 has been filled with many important events. They include a continued development of cooperative arrangements with the other national health organizations at 370 Seventh Avenue, New York City; the activities of the medical service; the continuance of the very important service rendered by the staff members in connection with the rehabilitation of tuberculous ex-service men; the development of the follow-up study of sanatorium cases; the development of the Modern Health Crusade after the most careful consideration of recommendations from authoritative sources; the Crusade is promoted as a broad method of health training, the essential function of which is giving school children practical information, leading to action in health instruction, furnished them through the schools and by other organizations; the publication of a handbook for teachers "Health Training in Schools"; the publication of a history of the National Tuberculosis Association; a continuance of the important work of the Committee on Medical Research; and lastly a statement of vital importance as an encouragement for anti-tuberculosis workers everywhere, a reduction of the death rate from tuberculosis in Framingham, Mass., to the figure of 40 per hundred thousand for the year 1921 in contrast to an average of about one hundred for the United States as a whole. In spite of the small unit of population, the shortness of the period of experiment, and the likelihood that next year the rate may go higher, still the present fact is momentous and inspiring.

NEW YORK ASSOCIATION FOR IMPROVING THE CONDITION OF THE POOR

Organized 1843.

Aim: To provide the following service for families under its care:

1. General educational nursing.
2. Prenatal and postnatal care for mothers and babies.
3. Country outings for tired mothers and anemic children, and a convalescent home for the recovery of mothers after childbirth.

4. Scientific training in the proper selection and preparation of food.
5. Medical and nursing care for tuberculous families in their own homes.
6. An intensive community health program in one of the city's most congested districts.

Board: The governing board consists of 40 members.

Territory: The work of the Association covers the Boroughs of Manhattan and the Bronx, an urban territory with a population of approximately 3,000,000.

Staff: General director. Doctors: 4 part-time. Nurses: 1 director, 6 supervisors, 46 staff. Dentists: 1 director, 1 full-time, 4 part-time. Director of Department of Family Welfare. Social service workers: 23. Nutritionists: 1 supervisor, 7 full-time. Clerical assistants: 53.

Type of work: Work of the Association includes home visiting, clinics, classes, hospital care and health centers, for mothers and children. Mental disease, tubercular and venereal disease patients are cared for.

Financial: The total budget for the year was \$891,085. Voluntary contributions support the Association.

General statement: The outstanding work of the Association during the year 1922 was the property development carried on at Caroline Nest and the construction of a new boy's camp in the Palisades Interstate Park.

THE NEW YORK DIET KITCHEN ASSOCIATION

Organized 1873.

Aim: To protect the lives and promote the health of babies, little children and their mothers.

Board: Forty-two members.

Staff: General and assistant directors; physicians for station conferences 21; nurses 12; station assistants 7; nutrition teacher 1; director of corrective physical exercise 1; instructor special exercise 1; part-time volunteer assistants 8; office workers 3.

Type of work: Six health stations are maintained.

Baby Welfare Work

Physical examination and supervision of babies.

Consultations and demonstrations for mothers.

Home visits by nurses.

Emergency care of sick babies.

Home nursing or hospital admission arranged.

Dispensing of milk.

Child Health Work

Physical examination and correction of defects for children of pre-school age.

Special instruction by nutrition worker.

Corrective physical exercise.

Family Health and Welfare Work

Supervision for expectant mothers through cooperating agencies or by Association nurses.

Health instruction in homes.

Dispensary and hospital treatment obtained.

Assistance in securing relief and employment.

General statement: 6,099 babies under care, 6,130 mothers advised and taught, 402 expectant mothers under supervision, 1,503 pre-school children examined and supervised, 969 baby conferences held, 37,017 visits made to baby conferences, 6,330 visits made to children's classes 21,450 visits made to homes by nurses and assistants, 516,669 quarts of milk dispensed.

NEW YORK NURSERY AND CHILD'S HOSPITAL, SOCIAL SERVICE DEPARTMENT

Organized 1923.

Aim: Hospital: Maternity and children's hospital and clinic.

Social Service: Prenatal care, supervision and follow-up of hospital and clinic children.

Boarding-Out Department: Care in foster homes of wards of city and other children.

Board: The governing board consists of 11 men and 9 women.

Territory: The organization serves an urban territory with a population of 401,000.

Staff: Superintendent. Social service: 1 head worker, 6 assistants. Clerical service: 1. Boarding-Out Department: 1 head worker, 3 assistants and clerk.

Type of work: Registration and social history of all clinic and ward cases. Prenatal and postnatal follow-up educational work. Pre-school and school age corrective posture, nutrition and cardiac classes.

Financial: The total budget for the Organization was \$445,988; the total budget for the Social Service Department was \$14,500. The Organization is supported by receipts from patients, public aid from the city, and donations.

STATE CHARITIES AID ASSOCIATION

Organized 1872.

Aim: The object of the State Charities Aid Association, which is a volunteer body of citizens in New York State, is to improve conditions in public charitable institutions and hospitals in New York State and to promote child care, public health, and mental hygiene.

Board: The governing board consists of 17 men and ten women.

Territory: The work of the organization covers the entire State.

Staff: The secretary is the chief executive officer. There are 4 assistant secretaries. The staff of the departments consists of trained executives, public health workers, nurses, social service workers, field agents and volunteer visitors.

Type of work: The work of the Association, so far as it relates to children, consists of (1) maintaining a department for assisting abandoned or deserted mothers with babies or small children to secure positions where they may keep the children with them during employment; (2) maintaining county agencies for dependent children whereby committees of citizens and a paid executive cooperate with the public authorities in providing for dependent children; (3) maintaining a department for placing orphaned and destitute children in family homes; (4) maintaining a department of tuberculosis and public health which devotes special effort to preventive activities among children; (5) maintaining a mental hygiene department which devotes a substantial proportion of its efforts to providing facilities for the prevention of mental disorders among children and in providing facilities for the treatment, care, and training of children with mental diseases or defects.

Financial: It is an incorporated body, statewide, but without state aid. Its budget is about \$340,000 a year and is met in the main by voluntary contributions.

General statement: The Association has 12,000 members; it has local committees in every county. Its voluntary visitors visit and inspect all public institutions.

The Committee for Assisting Dependent Mothers with Young Children, helped 1,927 women during the past year.

The Department of County Agencies for Dependent Children, has been instrumental in organizing work in behalf of needy and neglected children in more than one-half of the counties in New York State.

The Committee on Child Placing, receives orphans, foundlings and deserted children from public officials and public institutions for placement in carefully selected free homes.

The Committee on Tuberculosis is engaged in organizing, coordinating, and unifying the public health movement on the voluntary side as distinguished from the public, governmental side, particularly in work for the prevention of tuberculosis.

The activities of the State Committee dealing specifically with the health of children are:

1. Cooperating with the Infancy, Maternity, and Child Hygiene Division of the State Department of Health.
2. Promoting the participation of local committees in the establishment and maintenance of preventoria.
3. Encouraging and assisting local committees in the establishment and maintenance of children's health camps.
4. Introducing the Modern Health Crusade into local schools.
5. Stimulating the local organization and maintenance of other lines of child health educational work.
6. Encouraging local committees to weigh and measure children.
7. Cooperating with county home bureaus and Parent-Teachers' Associations in introducing hot lunches in rural schools.

The Mental Hygiene Committee has carried on extensive educational campaign through the distribution of 697,992 pamphlets, the holding of 465 public meetings and lectures, mental hygiene exhibits, conferences and newspaper publicity.

Newburgh

CHILD WELFARE COMMITTEE

Organized August, 1918.

Aim: Child health and care of mothers, also prenatal care.

Board: The governing board consists of 15 women.

Territory: The Committee serves the city with an urban population of 30,000.

Type of work: Home visiting and clinics are maintained for mothers and infants.

General statement: A trained nurse has been placed in the field who visits daily, expectant mothers, mothers, babies and children up to school age. Instructions are given in the preparation of food for both sick and well babies. Mothers are shown how to clothe their children properly and expectant mothers are shown how to make the first baby clothes.

Patchogue

SUFFOLK COUNTY TUBERCULOSIS COMMITTEE

Organized September 27, 1920.

Aim: To prevent the spread of tuberculosis and to help coordinate and unify the various lines of work carried on by the public and private agencies that have points of contact with the tuberculosis problem.

Board: The governing board consists of 13 men and 14 women.

Territory: The Committee serves an urban and rural territory with a combined population of 110,000.

Staff: The staff consists of an executive secretary; doctors: 1 director, 9 part time, 1 volunteer part time. Dentists: 4 part time. Nutritionists: 1 supervisor. Clerical assistants: 1.

Type of work: The Association conducts preventive, dental, and tuberculosis clinics and daily classes in occupational therapy.

Financial: The total budget for the year amounted to \$10,000. The organization is supported by the sale of Christmas seals.

General statement: The Association cooperates with the Suffolk County Tuberculosis Hospital, Board of Child Welfare, American Red Cross, Sanitary Supervisor.

Rochester

ROCHESTER GENERAL HOSPITAL AND DISPENSARY

Organized: Hospital in 1864. Dispensary in 1888.

Aim: To maintain public hospital in the City of Rochester.

Board: The governing board consists of 27 men and 25 women.

Territory: An urban population of 300,000 is served.

Staff: The staff consists of a superintendent of the hospital, a director of the dispensary; doctors: 4 part-time, 25 part-time volunteers. Nurses: 1 supervisor, 20 supervising, 130 staff, 6 graduates and 3 students in the dispensary. Dentists: 2 part-time, 1 volunteer. Social workers: 2 full-time. Nutritionists: 1 director, 1 part-time. Clerical assistants: 2. Volunteers: 4.

Type of work: Hospital care, home visiting and clinics for infants, children and adults, diagnostic, mental, visual and dental clinics are also conducted.

Financial: The total budget amounted to \$400,000. \$20,000 for dispensary work included in this amount. Dispensary charges are 25 cents for first visit, 10 cents for subsequent visits, and \$1 for X-rays.

5,791 patients made 29,959 visits during the past year. 400 mothers were cared for in the maternity wards. The hospital cooperates with the Social Welfare League, Baden Street Dispensary, Homeopathic Hospital and Convalescent Home.

THE TUBERCULOSIS AND PUBLIC HEALTH ASSOCIATION OF ROCHESTER AND MONROE COUNTY

Organized November, 1917.

Aim: To promote and carry on such educational, preventive and relief work as shall contribute to the improvement of health—with special emphasis on the prevention and control of tuberculosis.

Board: The governing board consists of 9 men and 2 women.

Territory: The Association serves an urban territory with a population of 315,000 and a rural territory with a population of 45,000.

Staff: Executive secretary. Doctors: 1 supervisor, 5 part-time. Nutritionists: 1 supervisor, 2 assistants. Occupational therapists, 2—one who visits the tuberculous patients, and one who supervises the curative workshop. Educational workers: one who devotes part-time to county work and part-time to health examinations, one who handles exhibit material and educational supplies, and outside work. Three others for part time as needed. Clerical assistants: 3.

Type of work: Health education, nutrition classes, occupational therapy, and health examinations.

Financial: The budget for the year was \$31,000. The Association is supported by the community chest for city work and by the sale of Christmas seals for county work.

Utica

BABY WELFARE COMMITTEE OF UTICA, INC.

Organized 1912. Incorporated 1915.

Aim: To reduce the infant mortality of Utica and to increase the health and vitality of its children.

Board: The governing board consists of 28 women.

Territory: The organization serves an urban territory with a population of 104,210.

Staff: Doctors: 1 director, 9 part-time, 2 of whom are volunteer. Nurses: 7 staff.

Type of work: Home visiting, clinics and classes are conducted for prenatal cases, infants and pre-school children. Four health centers are maintained. Little Mothers' Leagues are organized.

Financial: The total budget for the year was \$14,000. The organization is supported by an appropriation from the city, and an annual spring drive.

General statement: During the year 12,535 patients visited the clinics, and 29,155 visits were made by the nurses.

NORTH CAROLINA

Raleigh

BUREAU OF MATERNITY AND INFANCY, STATE BOARD OF HEALTH

Organized April 1, 1923.

Aim: The promotion of the welfare and hygiene of maternity and infancy.

Board: The governing board consists of 9 men.

Territory: The Bureau serves both urban and rural territory with a population of 2,556,486.

Staff: The staff consists of a director, state nurse, chief of division of maternal and infant literature, and two medical field supervisors.

Type of work: Educational, through distribution of literature, individual contact through county units in charge of specially trained public health nurses whose duties are restricted to maternity and infancy work. In each county where units are organized, prenatal and infant clinics will be operated by members of the local medical profession and an effort will be made to regularly supervise the health of the babies and expectant mothers.

Financial: The budget for the year amounted to \$78,000. The organization is supported by State and Federal Governments.

General statement: In addition to the above budget, and to still further increase the funds expended in this work, counties are required to match the joint State and Federal funds in the development of special county units. Local members of the medical profession who conduct prenatal and infant clinics will be paid for this work from joint funds up to \$500 a year, without any appropriation from the county being required.

OHIO

Canton

THE CANTON DAY NURSERY ASSOCIATION

Organized April, 1917.

Aim: To care for small children during the day while their mothers are at work away from home. Also to care for children temporarily sent to the nursery by the court or the Associated Charities.

Board: The governing board consists of 15 women.

Territory: The work of the Association covers the city, with a population of 100,000.

Staff: The staff consists of a matron, a nurse, a teacher, two maids and a supervising physician.

Financial: The total budget for the year was \$7,000. The Association is supported by the community chest. A fee of 5 cents per day is charged each child.

Cincinnati

BABIES MILK FUND ASSOCIATION

Organized January, 1919.

Aim: To promote health and welfare of infants and children of pre-school age through child hygiene, dental and prenatal clinics; also obstetrical and postpartum care in home when necessary.

Board: The governing board consists of 17 men and 7 women.

Territory: The Association serves an urban territory with a population of 401,247.

Staff: The staff consists of 18 graduate nurses, 13 physicians (1 full time, others part-time), 5 clerical workers, 1 half-time dentist and 1 dental attendant, 1 brace maker.

Type of work: The Association operates 6 child hygiene clinics, 4 prenatal clinics, 1 dental clinic, 1 orthopedic brace shop, gives medical care in homes when children are too ill to be taken to clinic, gives bedside care to obstetrical cases and nursing follow-up and instruction in homes.

Financial: The budget for the year amounted to \$57,000, support from community chest, and contributions.

General statement: Beginning March 1, 1923, the Babies' Milk Fund Association assumed medical supervision of six day nurseries. A clinic is held once each week in each of these nurseries. One full time nurse either visits or communicates with these day nurseries each day.

DENTAL HYGIENE SOCIETY

Organized September 7, 1910.

Aim: To teach mouth hygiene, prevent and correct dental defects and provide dental service for children whose parents are unable to pay for it.

Board: The governing board consists of 10 dentists and 3 lay members.

Territory: The Society serves an urban population of 75,000 children.

Staff: The staff consists of 2 part time, 5 full time dentists, and 6 dental assistants, 1 hygienist, 1 dental supervisor.

Type of work: Teaches mouth hygiene, cooperates with Board of Education in conducting dental inspection and educational lectures on mouth hygiene in the schools; operates free dental clinics for children unable to pay for treatment.

Financial: The total budget for the year amounted to \$20,500 and is supplied by the community chest and Board of Education.

General statement: Beginning this fall the Society will operate a Prophylaxis Clinic, which will be moved from school to school. This Clinic will be manned by student dentists from the University of Cincinnati and one dental hygienist; the hygienist besides operating, to do class-room work.

PUBLIC HEALTH FEDERATION

Organized 1917.

Aim: The coordination of public health activities and of public and private agencies. To serve as a forum for frank discussion of health problems, policies, and plans; to develop new, and to improve present standards of service through the study of special problems; to secure the active support of the general membership of the member agencies of the Federation for the measures agreed upon by the coordinating committee.

Board: The governing board consists of 21 men and 4 women.

Territory: The work of the Federation covers the city and county, which has an urban population of 401,247 and a rural population of 61,153, making a total population of 462,400.

Staff: The staff consists of the executive secretary and an educational director.

Type of work: The Federation operates through divisional councils: cancer control, child hygiene, housing, mental hygiene, mouth hygiene, nursing, social hygiene, tuberculosis.

Financial: The total budget for the year was \$12,086. The Federation is the health branch of the Council of Social Agencies and Community Chest from which it receives its funds.

General statement: Some outstanding features of the work during the past year were the following: establishment of a comprehensive mental hygiene clinic with an annual budget of \$30,000; campaign for additional state institution for the

feeble-minded; campaign for the health of pre-school age children; series of daily health articles in local newspapers through cooperation of group of local physicians; dental hygiene investigation and outline of program for county which has been adopted by County Board of Health; establishment of a heart clinic, cancer campaign, negro health week in cooperation with Board of Health and Negro Civic Welfare Committee; promotion of physical examinations for staffs of social agencies, cooperation with public schools committee on graded health course.

Cleveland

THE BABIES' DISPENSARY AND HOSPITAL OF CLEVELAND

Organized 1906.

Aim: The object of the society shall be to limit and prevent sickness and mortality among infants and children, and to provide medical and surgical aid and nursing care for sick babies and children.

Board: The governing board consists of 12 men and 23 women.

Territory: The Society serves an urban territory with a population of 796,836 and a rural territory with a population of 943,495.

Staff: Medical director, superintendent of nurses and a general staff of physicians and nurses.

Type of work: Babies' Dispensary for ill infants and children under 14 years of age. Physical examination of pre-school children coming to the infant welfare stations of the Department of Health. Dental clinic for pre-school children. Rural infant welfare clinics held from June 1st to October 1st. Ten suburban towns were visited. Milk station for patients of the Babies' Dispensary and the prophylactic babies' station of the Department of Health. Training of medical students in pediatrics. Post-graduate training for public health nurses in pediatrics in cooperation with the University District Training Center and with Western Reserve University. Post-graduate experience in pediatrics for physicians in Cleveland who wish to improve their training in this field.

Financial: The total budget for the year was \$90,863. The hospital is supported by the community fund, direct contributions, fees, endowment.

Proposed new work: 1. Educational campaign to instruct mothers in the importance of breast-feeding, also how to stimulate and increase the breast milk, 2. New Babies' and Children's Hospital to be completed in 1925. Capacity 150 beds. Funds raised April, 1923.

BUREAU OF CHILD HYGIENE, DIVISION OF HEALTH

Organized 1911.

Territory: The Bureau serves the City of Cleveland with a population of 854,565.

Staff: Physicians: Chief of Bureau on full-time, 16 on part-time. Nurses: director and assistants, supervisors and field nurses, 80 in all do generalized nursing which includes child hygiene, communicable disease and tuberculosis. Clerical assistants: 16, two at each of eight health stations, do generalized work for the whole division of health.

Type of work: Investigation, instruction and supervision of midwives in cooperation with the County Health officer, lectures and demonstrations to mothers, supervisory care of prenatal, obstetrical and postnatal cases, instruction on the care and feeding of infants and pre-school children and organization of local committees; physical examination of infants, pre-school and children; follow-up work to secure corrections of defects, distribution of literature and educational work by means of health lectures, moving pictures, health plays, newspaper service, supervision and development of a nutrition program; educational work with parents, children, schools, clubs and other organizations; teaching of mouth hygiene and securing dental inspection of children.

Financial: Total budget for 1922 \$89,032 city appropriation. Of the loss on milk of \$28,035.42 the city paid \$10,000 out of the above appropriation. \$18,035.42 was paid by the Babies' Dispensary. No fees except one of \$1 or less for demonstration of milk modifications, where parents are able to pay.

General statement: The Bureau cooperates with the Babies' Dispensary and Hospital, State Department of Health, State Board of Charities, Cleveland Humane Society, Cleveland Mouth Hygiene Association.

CHILDREN'S BUREAU

Organized April 1, 1921.

Aim: To investigate and plan for each child seeking admission to a child caring agency or institution in Cleveland, furnishing the social facts to their admission committee for decision, supervising families of admitted children and planning their return to their own family, or to normal family life in other homes.

Board: The governing board consists of 13 men and 36 women.

Staff: Executive secretary; 2 case supervisors, 22 case workers, 3 stenographers, and 1 clerk.

Type of work: The Bureau does case work with children either placing them in institutions doing follow-up work in their own homes or referring to child placing agency for care in free, adopted, or boarding homes.

Financial: The budget for the year was \$49,280. The Bureau is supported by the community chest.

General statement: The organization is the central planning and inquiry bureau for Cleveland's needy children, particular emphasis being placed upon investigating requests for admission to Cleveland's twenty-five institutions for dependent children. A special medical clinic has been organized at a hospital to provide thorough examination and follow-up work on children going to institutions and boarding homes. An old children's institution has been reorganized to provide special, medical, psychological, psychiatric, and observation study and planning for problem and subnormal children. Also operate during the summer months, the summer camp registry for registration and placement of needy children in summer camps.

THE CHILDREN'S FRESH AIR CAMP AND HOSPITAL OF CLEVELAND

Organized 1889.

Aim: To receive, care for, nurse, treat medically, and provide generally for weak, sick, indigent children, and to give needed instruction to their mothers.

Board: The governing board consists of 19 men and 6 women.

Territory: The organization serves an urban territory with a population of 888,519.

Staff: Superintendent of the organization, 1 doctor, 1 dentist, 2 nurses, 1 dental hygienist, 1 dietitian, 1 clerical assistant, 3 children's supervisors, 5 motor service volunteers.

Type of work: Year around preventive care is given children between 6 and 12 years of age, who are referred by other social agencies in the community. Work conducted as a health school having 24 hours daily control of the children. Cooperation of the Board of Education and the Public Library makes the work more efficient.

Financial: The budget for the year was \$45,653. The organization is supported by the community chest, endowment funds, private contributions, and fees, which are regulated according to the ability of families to pay.

General statement: During the year the daily average cared for was 85 children. 710 dismissed children returned for the Saturday morning health classes in which re-weighing and re-measuring of the child revealed his ability to continue good health habits at home.

THE CLEVELAND HUMANE SOCIETY

Organization April 3, 1873.

Aim: (a) To protect children of every race, color, and creed from cruelty, neglect, immorality, desertion, and non-support and from the effects of illegitimacy.

(b) To protect dumb animals from cruelty and abuse.

Board: The organization is governed by a board of directors of 38 members and an executive committee, consisting of 10 members.

Territory: Serves an urban territory with population of 888,519; suburban 146,651.

Staff: The staff consists of an executive secretary, field secretary, attorney, part time physician, case director, six supervisors and 34 visitors, seven visitors in training, 15 clerical, 4 animal agents.

Type of work: (a) Child protection, home finding and child placing. Also licenses boarding homes for State Division of Charities and supervises State children in boarding homes.

(b) Animal protection.

Financial: Supported largely through the Cleveland Community Fund, also through city, county and state appropriations and the interest on investments resulting from endowments.

General statement: The organization works in close cooperation with the Babies' Dispensary, children's clinics, hospitals, and all the other children's agencies. Children are given full physical and mental examination upon coming to the Society. Medical, surgical, and dental care is provided whenever prescribed and special attention is given to the treatment of handicapped children. During 1921-22 the Society gave protection to 5,478 children. 307 unmarried mothers were provided with care and plans made for their babies. The Home Finding Department secured 403 new family homes for the care of children. The Child Placing Department provided 1,825 children with home care during the past year. This department also provided supervision for 115 of the State Division of Charities.

THE CLEVELAND MOUTH HYGIENE ASSOCIATION

Organized 1912.

Aim: To educate the public in the hygienic value of healthy mouths and sound teeth, and to furnish instruction as to the best methods of securing them; to prevent dental caries by oral prophylaxis and by the care and preservation of the temporary teeth; to investigate the cause and to study the prevention of dental caries and other oral diseases; to remedy so far as possible existing conditions of dental caries and other oral diseases; to establish and promulgate a high standard of dental asepsis; to establish, promote, and maintain dispensaries; to advocate local, state, and national legislation in the interest of public health. To acquire, lease, or hold such real estate as shall be desirable for the accomplishment of the main purposes herein and to do all other things that are necessary and incidental for the promotion of public health and the proper conduct of the affairs of the organization.

Board: The governing board consists of 14 men and 5 women.

Territory: The Association serves an urban territory with a population of 796,836, and a rural territory with a population of approximately 1,000,000 (but no attempt is made to cover the entire county).

Staff: Director of the association; secretary; 3 dentists, 3 assistants.

Type of work: Dental service for children as a demonstration of its value and for immediate relief of suffering. Educational work with the children and their parents; and, especially with institutions and their governing bodies.

Financial: The budget for the year was \$11,000, plus earnings. The Association is supported by the community fund through the Welfare Federation of Cleveland.

General statement: Mouth Hygiene as a factor in the control of communicable diseases of childhood. There are many references to the lessened incidence of scarlet fever and diphtheria in public schools where mouth hygiene is practiced, but there are few if any statistics which bear evidence of this fact, therefore a little over a year ago a study was undertaken of the incidence of scarlet fever and diphtheria in seven schools with about 10,500 children in which there has been mouth hygiene for from three to eight years. This group was compared with about 83,000 children in some ninety schools in which there has not been mouth hygiene service.

The results shown at the end of the first year are not to be taken as conclusive evidence but a comparison will be made of the reports of several years, to learn whether or not they are a constant factor. This year the work is being enlarged to include certain other communicable diseases.

Incidence of dental caries: A study has also been made of the incidence of dental caries in schools with and without mouth hygiene and schools without medical inspection; the incidence of abscessed teeth under the same conditions will be noted. These studies will be used in determining the future program of the Association.

CLEVELAND NUTRITION CLINIC

Organized December, 1920.

Aim: Teaching the methods and practice for correcting malnutrition; educating the public to the need of nutrition work, and demonstration of the work by operating nutrition classes.

Board: The board consists of 4 men and 1 woman.

Territory: The Clinic serves an urban territory of 800,000.

Staff: The staff consists of a director; doctors: 1 part-time; also school doctors in buildings where classes are held; nutritionists: 3 full-time, 1 part-time volunteer.

Type of work: Nutrition classes for malnourished children; instruction in nutrition methods at Cleveland School of Education; general health work in 2 public schools and 1 parochial school. Courses of lectures to teachers, social workers, nurses, clubs and Parent-Teacher Associations.

Financial: The total budget amounted to \$9,285. The Clinic is supported by a Community Fund.

General statement: The cooperating agencies are the Public Health and Dental Dispensaries, Hospital Dispensaries, Children's Fresh Air Camp, Associated Charities, Board of Education and Western Reserve University.

THE CLEVELAND PROTESTANT ORPHAN ASYLUM

Organized January 22, 1852. Incorporated February 22, 1853.

Aim: The purpose of the institution is to gather in homeless and dependent children, such as are sound in body and mind and prepare them for homes, either with relatives, friends, or foster parents.

Board: The governing board of managers consists of 15 women, assisted by an auxiliary board of 7 women. There is also a board of trustees consisting of 5 men of prominence in the community.

Staff: Superintendent, assistant superintendent, matron visitor, physicians, nurse, and clerk.

Type of work: Children 2 years of age, who come under the control of the institution for placement in foster homes, are boarded out in private families, those from 2 to 6 years of age are sheltered in the nursery department of the institution. The clinic at the institution supervises the weighing, charting, and dieting of the underweight children. The hospital is equipped for children who need special care for slight ailments. The children are sent to a summer camp during vacation; this is a big factor in the pursuit of better health.

Financial: The institution is fortunate in having an endowment, but receives no income from the state, county or city.

General statement: The outstanding feature in the work of the medical department has been the absence of diphtheria, not a single case having occurred among the children during the year. This gratifying experience has been no doubt due to the systematic use of toxin-antitoxin, every child receiving three doses intramuscularly, during its stay in the observation department. In addition, throat cultures are taken and several carriers have been detected and isolated. The city health officials have been very helpful in their cooperation in the control of these cases. It is a reasonable hope that this dread disease has been conquered in so far as the institution is concerned. Advantage has been taken during the year of recent studies in the prevention of goitre. Plans are in preparation for the development of the organization's farm of 100 acres upon which will be erected cottages for the care of children and a hospital for minor operations and contagious diseases.

COUNCIL EDUCATIONAL ALLIANCE

Aim: Social Settlement.

Board: The governing board consists of 14 men and 11 women.

Territory: The Alliance serves an urban territory with a population of 1,000,000.

Staff: The staff consists of a headworker; social workers: 1 director, 9 full-time, 1 part-time, 50 volunteers; nutritionists: 1 director.

Financial: The total budget for the year amounted to \$28,000 and is supported by the Community Chest.

General statement: The Alliance works jointly with the Cleveland Settlement Union.

DAY NURSERY AND FREE KINDERGARTEN ASSOCIATION

Organized 1882.

Aim: To maintain day nurseries for the children of women obliged to assume the support of the family; to conduct free kindergartens; to provide medical inspection and dental care; to operate a training school for kindergarten and primary teachers.

Board: The Association is governed by a board of 40 trustees and an Association membership of 130.

Territory: The territory covered is urban with a population of approximately 796,838.

Staff: Executive of the Association. Doctors: 1 supervisor, 1 part-time. Social workers: 1 supervisor, 9 assistants. Clerical assistants: 2. Volunteer workers: 40.

Type of work: Home visiting and clinics for pre-school and school children are maintained.

Financial: Budget for 1923—total expense, \$88,535; earnings, \$13,474; endowment, \$18,516; Community Fund, \$56,544.

General statement: The most interesting innovation in our work is the opening of a nursery school, with accommodation for 25 children between the ages of 15 months and four years. Students in our Kindergarten-Primary Training School will use the Nursery School for observation and practice work.

JONES HOME FOR FRIENDLESS CHILDREN

Organized December, 1886.

Aim: To care for dependent and neglected children.

Board: The governing board consists of 15 men and 51 women.

Territory: An urban territory is served with a population of 900,000.

Financial: The budget for the year amounted to \$28,000, and is supported by Endowment Fund and Welfare Federation.

MERRICK HOUSE DAY NURSERY AND SETTLEMENT

Organized September, 1919.

Aim: To care for the children of working mothers; to provide recreational and educational opportunities for children and adults.

Board: The governing board consists of 8 men and 10 women.

Territory: An urban territory is served with a population of 25,000.

Staff: The staff consists of an executive, a medical director, a nursing director, 2 children's nurses, 1 assistant nurse, a dental director, a director of social work, 1 assistant, and 1 clerical assistant.

Financial: The total budget for the year amounted to \$23,000. The organization is supported by an appropriation from the Community Fund. Average fee for a child is 10 cents a day.

PUBLIC HEALTH NURSING DISTRICT, WESTERN RESERVE UNIVERSITY

Organized: Course started 1911. District established February 1, 1917.

Aim: To train graduate nurses for the field of public health nursing and to offer experience in this field for a limited period to senior nurses in hospitals and to give them an appreciation of public health work.

Board: The governing board consists of 3 men and 17 women.

Territory: An urban territory is served.

Staff: The staff consists of 2 directors; doctors: 4 part-time, and 2 medical students; nurses: 1 director, 5 supervising, 3 staff; nutritionists: 1 part-time, 1 volunteer; clerical assistants: 5 full-time.

Type of work: Home visiting and clinics for prenatal patients; infants and pre-school children; home care is also given to postnatal patients. Classes for instruction in prenatal care.

Financial: The total budget for the year amounted to \$29,982, plus \$600 from the city towards the rent, and supported by funds from the Community Chest.

General statement: From January to September, 1923, the number of patients enrolled at the prenatal clinic was 601, infant clinic 792, pre-school 740. Home visits paid to prenatal patients 426, postnatal 103, infants 1,650; pre-school 746. Prenatal classes and the pre-school nutrition clinic were established this year.

RED CROSS TEACHING CENTER

Organized July 4, 1916.

Aim: A wider extension and more diligent dissemination of public health education; the prevention of disease itself and the checking of the spread of disease; the teaching of mothers the best methods of instructing their children in correct health habits; the attainment of having in every home at least one woman familiar with the fundamental principles of health and the care of the sick.

Board: The governing board consists of 21 women.

Territory: The organization serves an urban territory with a population of 796,836, and a rural territory with a population of 1,022,308.

Staff: Director of the organization, assistant director, secretary, 5 nurse instructors.

Type of work: The work includes health instruction, home nursing, and first aid to the injured.

Financial: The total budget for the year was \$20,000. The organization is supported by the community fund.

General statement: During the school year, 844 students received Red Cross certificates, a large proportion of these being high school students whose course covered 18 weeks, five periods a week. Average weekly attendance 1,163.

At summer camps, 150 students had lessons each week for 11 weeks; 750 individual children each had two health talks.

Health bulletins were issued monthly to factories, stores, organizations, and individuals. Monthly distribution 3,500.

THE SALVATION ARMY RESCUE MATERNITY HOSPITAL AND NURSERY

Organized March, 1892.

Aim: To care for wayward and unfortunate girls and their dependent children.

Board: The hospital is governed by a board of 6 men and 1 woman.

Territory: The work of the organization covers the entire state.

Staff: Superintendent, medical director, 3 doctors part-time (volunteer), director of nursing service and supervising nurse.

Type of work: Hospital care is provided for girls who come to us in a pregnant condition.

Financial: The budget for the year was \$8,555. The Home and Hospital are supported partly by the Welfare Federation. Fees are regulated for each patient.

SOCIETY OF THE HOME OF THE HOLY FAMILY

Organized March 14, 1895.

Aim: To care for homeless and dependent children, giving them home training.

Board: The governing board consists of 4 women.

Territory: The Society serves the city with an urban population of 950,000.

Staff: The staff consists of an executive, 3 doctors, volunteer part-time, 1 clerical assistant, 4 volunteers.

Type of work: Classes are held for pre-school, school, adolescent, and dependent children.

Financial: The total budget amounted to \$12,071 and is supported by contributions and the Community Chest.

VISITING NURSE ASSOCIATION OF CLEVELAND

Organized 1903.

Aim: To provide nursing care to the sick in their homes.

Board: The governing board consists of 5 men and 45 women.

Territory: The Association serves an urban population of approximately 796,836.

Staff: The staff consists of a superintendent, associate superintendent and 41 nurses.

Type of work: Home visiting, prenatal and postnatal clinics.

Financial: The budget for the past year was \$113,736.34. The Association is supported by fees, donations, and endowments.

General statement: The Association cared for 15,080 patients and 105,943 visits were made. Of these 73 per cent were working calls, 13 per cent instructive and 14 per cent social service.

Columbus

THE OHIO STATE ASSOCIATION OF GRADUATE NURSES

Organized 1904.

Aim: The advancement of the Educational Standard, the furtherance of the efficient care of the sick, maintenance of the honor and character of the members of the Nursing Profession; and the fostering and promotion of cordial relations between the Graduate Nurses of Ohio and those of other States and Countries.

Board: The governing board consists of 9 women.

Territory: The Association covers both urban and rural territory with a population of 5,739,394.

Financial: Supported by membership dues.

East Cleveland

EAST CLEVELAND WELFARE ASSOCIATION

Organized May, 1921.

Aim: To conduct East Cleveland Babies' Dispensary for children of pre-school age.

Board: The governing board consists of 4 men and 11 women.

Territory: The territory covered is urban with a population of approximately 30,000.

Staff: Doctors: 2 part-time. Nurses: 1. Helpers: 1 part-time. Dentists: 1 part-time. Volunteer workers: 2 part-time.

Type of work: Home visiting, clinics and health centers are maintained for infants and pre-school children.

Financial: The budget for the year was \$5,000. The Association is supported by the community chest.

General statement: From September 1, 1922, to August 31, 1923, 2,204 patients visited the clinic, 1,749 home visits made by nurse, 63 patients given home care, and 152 diphtheria toxin, anti-toxin inoculations given.

Elyria

OHIO SOCIETY FOR CRIPPLED CHILDREN

Organized May, 1919.

Aim: The care, cure, and education of the crippled child.

Board: The governing board consists of 53 men.

Territory: The work of the Society covers the state, both urban and rural with a combined population of 600,000.

Staff: The staff consists of an office secretary, public health nurses, and clerical assistants.

Type of work: (a) To secure surveys of existing conditions in every county in Ohio. (b) To establish orthopedic centers throughout the state. (c) To promote the establishment of special schools for crippled children through educational bodies so that proper facilities for academic and vocational education might be afforded to all crippled children in Ohio. (d) To maintain a central bureau to initiate, coordinate, and direct the securing and compiling of information concerning care, cure, and education of crippled children. (e) To aid the advancement of the science of orthopedics, the necessary research to develop preventive measures, the hospital management in securing proper equipment pertaining to the care, cure, and education of crippled children.

The Society is supported by the Rotary Clubs and by State appropriation.

General statement: The active memberships of the Society is confined to members of Rotary, working in harmony with all the agencies that have been or are being established for the benefit of the crippled children, keeping in mind always that the duty of Ohio is not to any particular section, but to all Ohio. The foundation has been laid and a start made in a work almost altogether neglected previously. If this plan is successful in Ohio, there is no reason why with the great power of International Rotary, the entire United States should not be worked out on the Ohio plan of taking facilities to the child and not the child to the facilities.

Toledo

TOLEDO DENTAL DISPENSARY ASSOCIATION

Organized October 20, 1920.

Aim: To maintain free dental dispensaries for such children and adults in Toledo as are financially unable to pay for dental care; to provide, as the opportunity arises, branch dental units for the Toledo schools, and to use every reasonable means to carry on a propaganda tending to increase knowledge in the value of oral hygiene.

Board: The governing board consists of 13 men and 7 women.

Territory: The Association serves an urban population of 270,000.

Staff: Executive secretary, supervising dentists on Board of Directors, 1 full-time dentist, 1 part-time dentist, 1 dental assistant.

Type of work: Prophylaxis treatment, extraction, and fillings, educational work through the distribution of booklets on the care of the teeth, dental films; tooth brushes and tooth paste are distributed when necessary.

Financial statement: The total budget amounted to \$7,000, and is supported by funds from the community chest and contributions. A small fee is charged in cases where the family's income seems to warrant it.

General statement: An attract-o-scope showing slides of teeth, their structure, causes and process of decay and methods of prevention, has been installed in the dispensary. During the past year 1,320 new patients applied for dental treatment, of these 802 were children.

THE TOLEDO DISTRICT NURSE ASSOCIATION

Organized 1901.

Aim: To provide home nursing for the sick of Toledo.

Board: The governing board consists of 21 women.

Territory: The territory served is urban with a population of approximately 252,370.

Staff: Doctors: 1 supervisor, 40 volunteers. Nurses: 1 supervisor, 3 supervising, 29 staff. Social worker: 1. Nutritionists: 2. Vocational worker: 1.

Type of work: Home visiting and clinics form the greater part of the work. Mothers and infants are cared for particularly. Obstetrical cases, mental, cardiac, orthopedic, tubercular, and occupational therapy patients are served. Preventive and educational work is emphasized.

Financial: The estimated budget for the year was \$77,680. The Association is supported by the community chest and fees.

General statement: In addition to the usual activities the Association hopes to increase the nutritional work and add a worker to do follow-up work on infantile paralysis, as well as work in a posture clinic. School work is under the supervision of the board of education.

OKLAHOMA

Oklahoma City

OKLAHOMA PUBLIC HEALTH ASSOCIATION

Organized April 23, 1917.

Aim: To provide health education.

Board: The Association is governed by a board of 40 men and women.

Territory: The work of the Association covers both urban and rural territory with a population of 2,000,000.

Staff: Managing Director; one director and assistant for school educational work; two field nurses; two clerical assistants.

Type of work: Among schools, direction and propagation of the Modern Health Crusade, distribution of literature and aids to the teaching of hygiene to teachers throughout the state, and the conduct of stunts and health pageants. The field nurses are loaned to counties not having sufficient funds for full time nursing service for the purpose of inspecting school children and preparing for a clinic. These nurses go to our poorer communities for from one week to two months depending upon the amount of time the community can pay for. A volunteer staff of specialists give their services for occasional clinics in such communities.

Financial: The total budget for the year was \$30,000.

TUBERCULOSIS SOCIETY OF OKLAHOMA CITY

Organized March, 1918.

Aim: Health education among children and adults; the promotion of better and more extensive health service among volunteer and official health agencies of the city; the prevention and limitation of tuberculosis.

Board: The governing board consists of 11 men and 5 women.

Territory: The Society serves the cities of Oklahoma City and Edmond with

populations of 105,000 (est.) and 3,500 respectively and the county of Oklahoma, including county towns, with a population of 35,000.

Staff: Executive secretary. Physicians: 1 chief of clinic, 4 associates (all volunteers). Nurses: 2 full-time. Dentist: 1 part-time volunteer. Department heads: 1 director of Modern Health Crusade. Clerical assistants: 1.

Type of work: Nursing inspection in all rural schools, with the Modern Health Crusade in all county and city schools. A tuberculosis dispensary is maintained with free service in the form of examinations, laboratory work, and follow-up in the home. A nominal charge of \$2 per plate is made for X-ray, where the patient is able to pay. The Society is active in the distribution of health literature, delivering of health lectures, organization of county health committees, and promotion of health activities among other organizations. Much of its work is carried on through committees from its board of directors.

Financial: The total budget for the year was \$17,610.32; \$3,550 of this amount being for the support of its national and state affiliated agencies, from whom adequate returns were received in service and promotion of health activities in unorganized territory. The Society's support came from the sale of Tuberculosis Christmas Seals and appropriation from the United Charities.

General statement: The city tuberculosis nursing and the dispensary nursing service is carried on for the Society by the Public Health Nursing Association. The Society makes a point of cooperating to the greatest possible extent with all other agencies.

Tulsa

TULSA COUNTY PUBLIC HEALTH ASSOCIATION

Organized 1918.

Aim: Health education, prevention of disease and corrective work.

Board: The governing board is composed of 25 men and 7 women.

Territory: The work of the Association covers both urban and rural territory.

Staff: The staff consists of one supervisor of medical service and three physicians (volunteer service), one supervisor of nurses and four staff nurses.

Type of work: Home visiting and clinics for maternal, prenatal, obstetrical, postnatal and tuberculosis patients, infants and pre-school children; health crusades and regular inspection and corrective work in the county schools.

Financial: The total budget for the year was \$18,000. The Association is supported by the sale of Christmas Seals and by special contributions.

General statement: The Association is affiliated with the National Tuberculosis Association, Oklahoma Public Health Association and the American Child Health Association.

OREGON

Portland

BUREAU OF CHILD HYGIENE, STATE BOARD OF HEALTH

Organized January 1, 1922.

Aim: The Bureau was organized to stimulate, encourage and further activities in maternal, infant, and child hygiene and welfare.

Board: The governing board consists of 6 men.

Territory: The work of the Bureau covers an urban territory with a population of 400,000, and a rural territory with a population of 380,000, a total population of 780,000.

Staff: The staff consists of a physician, an office secretary, two general staff nurses and one special nurse.

Type of work: Establishment of maternal, infant and child welfare clinics; issuance of prenatal advisory letters; distribution of literature on maternal and child care; newspaper publicity; lectures before organizations and clubs; supplying individuals and organizations with information material on maternal and child welfare; affiliation with University of Oregon School of Social Work for Field and Lecture Service.

Financial: The budget for the past year was \$15,975. The Bureau is supported by state and federal appropriations.

General statement: The Bureau of Child Hygiene began operation from the first of April, 1922. During that period 1,207 prenatal letters have been sent out, 20,000 pamphlets distributed, 70 lectures given, 3,500 children examined, 82 clinics held by staff, 24 new infant clinics and 1 new prenatal clinic established. All work is carried on in cooperation with public health nurses in counties and cities, health associations, women's organizations, and schools.

VISITING NURSE ASSOCIATION

Organized 1902. Incorporated 1913.

Aim: To give bedside care, prevent disease, and promote community health.

Board: The governing board consists of 18 women.

Territory: The work of the Association covers the city. Portland is a city of scattered population, making the transportation problem of serious concern. There is also a large floating population which, during the winter months, establishes itself in the outlying districts.

Staff: The staff consists of a superintendent, general supervisor, tuberculosis supervisor, and infant welfare supervisor, tuberculosis nurse and 10 district nurses and 2 clerical assistants.

Type of work: Bedside care is given maternity, acute, chronic, contagious and tuberculous cases. Prenatal patients are instructed, referred to clinics, and arrangement made for confinement. Instructions are given on the home care of tuberculosis and provision made for sanitarium care. Infant welfare clinics are conducted. The Association cares for all babies handled by them in maternity cases for one year. The Association refers pre-school nutrition cases to the nutrition clinic of the Portland Free Dispensary and does follow-up work for the clinic in the homes of school children. The nurses arrange for the correction of physical defects in pre-school children and cooperate with the school nurse in arranging for medical and surgical treatment of school children.

Financial: Budget for the year \$33,271.02. Association is supported by the Community Chest, appropriation from the city, membership dues, donations, fees, and payments from Metropolitan Life Insurance payments.

General statement: Total number of patients cared for during the year 5,109. Total number of home visits made 26,190. Interest in the well baby clinic continues to grow; 2,439 visits were made to the well baby clinics. In the districts where there are no Infant Welfare Clinics, the same constructive work is being done by the nurses in their home visits to mothers who have received prenatal and postnatal care. The Association was selected as one of the fifteen Visiting Nurse Associations to be studied throughout the United States by the N. O. P. H. N.

YOUNG WOMEN'S CHRISTIAN ASSOCIATION

Organized November 21, 1900.

Aim: To associate young women together in personal loyalty to Jesus Christ.

Board: The governing board consists of 27 women.

Territory: The population in territory covered is 275,000.

Type of work: The development of women and girls physically, mentally, and spiritually.

Financial: The total budget for the year amounted to \$136,000. The Association is partially self-supporting and the remainder by Community Chest.

General statement: During the year 1922, service rendered totaled 665,000.

PENNSYLVANIA

Chester

CHILD HEALTH CENTERS

Organized in 1918 under volunteer auspices through inspiration of Children's year.

Board: The governing board consists of 14 women.

Territory: Serves the City of Chester with a population of 65,000.

Staff consists of 2 doctors, 1 dentist, 2 nurses and 4 volunteer workers.

Type of work: Preventive and educational work for infants and pre-school children by conferences at the centers, and home visits. Birth certificates are given every child born in Chester.

Financial: The budget amounted to \$4,000, and is supported by special contributions and appropriation from Chester City Council.

General statement: The cooperating agencies are the Mothers' Clubs, Women's Clubs, Red Cross Nursing Service, Hospitals, Associated Charities (relief), and Mothers' Pension Fund.

Philadelphia

THE BABIES' HOSPITAL OF PHILADELPHIA

Organized June, 1911.

Aim: To provide treatment and care for sick babies; to instruct and train suitable persons in the duties of caring for babies; to institute plans and means for the study, prevention, and care of disease in early life.

Board: The governing board consists of 17 men and 4 women.

Territory: The Hospital serves an urban territory with a population of 1,823,779. The out-patient and social service departments, in addition to covering the home territory of hospital patients, does intensive work in the ward in which the dispensary building is located.

Staff: The staff consists of a superintendent, who is also a director of nursing service, 1 to 3 internes, 3 to 8 graduate nurses, and 3 to 10 pupil nursery-maids, head social worker and 15 visiting nurses, part-time nutritionist, part-time dental hygienist, laboratory technician, part-time druggist.

Type of work: Started as a summer hospital in the country. Is now conducting, in addition, an out-patient department in the congested district of the city, with clinics and health centers for children under 6 years of age, diagnostic and prenatal clinics for mothers, emergency beds for dispensary patients, a social service and follow-up system. In connection with this department there is a summer seashore home which provides rest and instruction for mothers and health giving environment for their children.

Financial: Supported by Welfare Federation of Philadelphia. No fees charged but contributions encouraged. Budget for 1923—\$73,789.

General statement: During the year ending September 1, 1923, 2,655 patients made 15,482 visits to the clinics. 46,516 home visits were made by the nurses, and 237 patients were given hospital care.

THE CHILD FEDERATION

Organized September 30, 1913.

Aim: Promotion of health of babies and children through research, education and demonstration.

Board: The governing board consists of 11 men and women.

Territory: The Federation serves an urban territory with a population of 1,823,158.

Staff: Managing director and assistant, dental hygienist, nutrition specialist, and clerical assistant.

Type of work: Research, demonstration in a limited area of plans for improvement, selling results to whole community and thus assuring permanence and extension through governmental or other agency.

Financial: The total budget for the year was \$18,570. The Federation is supported by the Welfare Federation.

General statement: Research direct and through committees of experts. Present demonstrations: Nutrition and mouth hygiene through clinics, and classes for children, pre and postnatal mothers, and lecture courses for nurses, teachers and professional schools; little mothers' leagues; pre-school examinations. Prenatal care: Effort through committees of physicians and workers and propaganda to improve character and increase amount of care given; annual survey, questionnaire and record sheets.

CHILDREN'S HOSPITAL, DEPARTMENT FOR THE PREVENTION OF DISEASE

Organized: Hospital organized 1855, Department for the Prevention of Disease 1913.

Board: The control is vested in a board of 18 managers.

Territory: Serves an urban population in the Thirtieth Ward.

Staff: The staff consists of a medical director, 15 doctors, 1 dentist, 1 clinical assistant, 8 nurses, 1 health teacher, 3 clerical assistants, 58 volunteer workers.

Type of work: Health education through health clubs and classes for children of all ages, health clinics, prenatal clinics, tuberculosis, rachitis, and diphtheria prevention clinics, dental clinic, home visiting, teaching center for students enrolled in the Pediatric Department of the School of Medicine, University of Pennsylvania, and students from the Pennsylvania School for Social Work, and pupil nurses of the hospital; organization of a Child Hygiene Association as a forum for the study of child health.

Financial: Budget for year \$10,416.56, supported by donations, gifts, funds and membership dues.

General statement: During the past year attendance at health clinics was 2,093, diphtheria prevention 990, clubs and special classes 3,958, tuberculosis prevention clinic 101, rickets prevention clinic 56. Home visits made by nurses 7,235. This year it is planned to conduct an intensive health demonstration in a limited district in the vicinity of the hospital.

COMMUNITY HEALTH CENTER

Organized March, 1921.

Aim: Diagnostic clinic, preventive medicine, and health education.

Board: The governing board consists of 7 men and 13 women.

Territory: The work of the Center covers an urban territory.

Staff: Executive secretary, supervisor of medical service, psychiatrist, psychometrist, 4 doctors, part time, dental supervisor, 2 dentists, part time, 10 social workers (free service), laboratory supervisor, 4 clerical assistants, and 20 volunteer workers.

Type of work: Diagnostic clinic, referring to hospitals for treatments, clinics and classes for preventive and educational work, clinics for dental and mental disease work, nutrition class, and laboratory.

Financial: The Center is supported by the Federation of Jewish Charities.

General statement: During the year May, 1922, to May, 1923, 4,908 diagnostic examinations were made by the staff; of these 4,091 were physical examinations and 817 were mental examinations. 3,442 individuals received dental treatment and 3,270 tests were made in the laboratory.

PHILADELPHIA ASSOCIATION OF DAY NURSERIES

Organized 1908.

Aim: The establishment and maintenance of the highest type of child care in every nursery, with constructive service to the family of which the child is a member.

Board: The executive committee consists of 10 women and the board of directors consists of the presidents of the 20 member nurseries.

Territory: The Association serves both urban and rural territory.

Staff: Executive secretary.

Type of work: The Association is composed of 20 nurseries, having an average daily attendance of 1,800-2,000 children ranging from 9 months to 12 years of age. The central office is interested in furthering the mental, physical, and social welfare of this group, and is an educational agency for the dissemination of progressive methods of nursery care.

Financial: The budget for the year was approximately \$3,500. The Association is supported by membership dues and the Welfare Federation.

General statement: The majority of the nurseries are now giving a complete physical examination to every child on admission, with regular weighing and routine re-examination at stated periods. Recommendations are followed up by a nursery visitor—in 11 nurseries by a trained social worker—using available hospitals, clinics or health centers. Attention is given to diet, rest and recreation with special attention to the undernourished child. The Schick Test, with cooperation from the mother, has become almost as routine as vaccination, which is compulsory. The past year has brought forth much improvement in buildings and equipment, and greatly increased interest in the general conditions of the home from which and to which the nursery child comes and returns.

PHILADELPHIA HEALTH COUNCIL AND TUBERCULOSIS COMMITTEE

Organized 1919.

Aim: Promotion of health by education and other methods. Demonstration of methods of prevention and treatment of tuberculosis. Cooperation with official agencies in similar work.

Board: The governing board consists of 19 men and 3 women.

Territory: The Committee serves an urban territory with a population of 1,900,000.

Staff: Physicians: 2 part-time making examinations among industrial workers, 7 conducting negro clinics. Nurses: 1 assisting in industrial health work, 2 working in summer camp and preventorium, 5 in negro clinic work. Executives: 3 men, including director, doing executive work in the office, 3 women, doing executive work in office and 1 woman assistant executive, 7 office assistants with 3 temporary workers.

Type of work: Health education and information service, industrial health service, child health service, negro health service, statistical and research service and Christmas Seal sale service.

Financial: The total budget for the year amounted to \$90,000 and is supported by Christmas Seal sale.

PRESTON RETREAT SOCIAL SERVICE

Organized April, 1915.

Aim: To help mothers take better care of themselves, their children, and homes.

Board: The governing board consists of 21 women.

Territory: The work of the organization covers an urban territory.

Staff: The staff consists of a supervisor of nursing service, two doctors, and one social service worker.

Type of work: Home visiting and clinics conducted for maternity and prenatal cases. Home visiting for postnatal cases.

Financial: The organization is supported by special contributions and membership dues.

General statement: During the year 447 prenatal patients were enrolled at the clinic; 317 patients were given hospital care. The infant mortality rate was 7 per cent.

ST. CHRISTOPHER'S HOSPITAL FOR CHILDREN
SOCIAL SERVICE DEPARTMENT

Organized: Social Service Department 1908.

Aim: To take care of social and medical problems of hospital and dispensary patients; to supervise care of babies; conducting of nutrition, health, and well clinics.

Board: The governing board consists of 20 women.

Territory: The Hospital serves an urban population.

Staff: The staff consists of a director, baby worker, and children's worker.

Type of work: Medical follow-up, health work, and social service.

Financial: The Social Service Department is supported by the hospital, state appropriation and welfare.

THE WHITE-WILLIAMS FOUNDATION

Organized 1800. Reorganized 1918.

Aim: The work in which the Foundation is now engaged is the development of a system for studying the social background and personal characteristics of the individual child in the schools in order to give him the educational and vocational guidance adapted to his needs.

Board: The governing board consists of 14 men and 12 women.

Territory: The Foundation serves the city with an urban population of 256,137.

Staff: The staff consists of a director, a supervisor of social workers, an assistant supervisor, 19 full time social workers, 6 part time, and 30 part time (volunteer service), 15 clerical assistants, 4 volunteers.

Type of work: Vocational guidance, administration of scholarships, junior employee service, health literature.

Financial: The total budget for the year amounted to \$96,160.50 and is supported by interest on investments, contributions, and Community Chest.

General statement: The Foundation cooperates with family agencies, child-caring agencies, health agencies, hospitals, courts, protective agencies, special agencies for girls, Child Welfare League of America, and social service exchange.

Because adequate social work with school children in a city the size of Philadelphia is too great for any private organization to undertake, the Foundation is only attempting to meet the present needs of children in one of each of the different kinds of public schools, with the expectation that the Board of Public Education will ultimately take it over. Already the Board has partially taken over the Junior Employment Service, adopting the methods worked out by the Foundation and employing some of its personnel. Through the gift of the Commonwealth Fund it is possible to offer fellowships for training in school counseling to properly qualified applicants. As this grant was not made until rather late in the fall, it was considered best to begin the course February 1st, in order to fit in with the second term of the Pennsylvania School of Social and Health Work. Qualifications for applicants were: college education, teaching experience, and some training or experience in social work. From different parts of the country about thirty-five applications were received, which were narrowed down to ten, and finally from the list there were chosen five full time fellows and two part time. These last were high school teachers, a man and a woman. This particular part of the plan has worked remarkably well and we feel that it is valuable publicity to get teachers already in the schools trained in school counseling.

Pittsburgh

FEDERATION OF JEWISH PHILANTHROPIES OF PITTSBURGH

Organized January, 1912.

Aim: To federate all Jewish philanthropic activities.

Board: The governing board consists of 22 men and 2 women.

Territory: The Federation serves a population of 40,000.

Staff: The staff consists of an executive director, secretary, and the necessary clerical and stenographic assistance.

Type of work: Federating Jewish philanthropies.

Financial: The budget for the year amounted to \$250,000, and is supported by memberships.

PITTSBURGH CHAPTER, AMERICAN RED CROSS

Organized 1917.

Aim: Care of ex-service men and families; to act in case of disasters or epidemics.

Board: The governing board consists of 10 men and 10 women.

Territory: The Chapter serves the county and any district where needed.

PUBLIC HEALTH NURSING ASSOCIATION

The fifth year of the Public Health Nursing Association of Pittsburgh began July 1, 1923, with a staff of eighty-two, this includes executives, supervisors, field nurses and the clerical force for both city and county services, seventeen nurses being engaged in county work.

The city service is conducted through ten substations, eight of which are in the city proper, the remaining two being beyond the city line. One of these stations is supported by a special fund, the other one is included in the city budget.

To date there are eleven affiliations with industries to whose employees we are giving nursing and instructive service.

A Teaching Center is maintained to which six hospital training schools send their pupil nurses for three months' experience in public health nursing.

Supervisors' meetings are held regularly once a week. Staff dinners are held once a month at the Y. W. C. A. to which an interesting speaker is invited.

The outstanding event of the year was the campaign which was organized to collect funds for the Association, for a two years' budget. The campaign lasted throughout January, with a gratifying result. "Advance Publicity" was done by means of the radio, pamphlets, talks to woman's clubs, industrial groups, schools, social service groups, civic bodies and individually whenever possible. The actual work has grown markedly in the past year. The most cordial cooperation is being given by the physicians, municipalities, the social workers, hospitals, and all charitable agencies.

The Child Welfare Division has shown more of a growth in the quality of work rather than quantity, in the second year. The work was first started in August, 1921, and the number of babies under the care of the organization increased from 789 to 3,384 during that first year. The second year the increase has been much less. The total number of babies supervised in August, 1923, was 3,846. The work, however, is on a firmer foundation and is taking its place in the community as an essential part of the community life. The mothers appreciate the value of the service given by the nurse and the instructions received at the conference, and are more often seeking this service themselves.

There have been three new conference stations opened during the past year. Two of these were in districts where the nurses have been doing instructive work in the homes, but where it had been impossible to previously open the conferences. The third, at the Irene Kaufmann Settlement, was necessitated by the large attendance in that particular district. During the summer the attendance has averaged about 100 each week. In order to give each mother the individual attention which is necessary, a second conference for that district was opened.

Dr. J. Donald Iams was appointed medical director of the Child Welfare Division in February. Dr. Iams supervises all the conferences, lectures to the nurses and approves all policies of the organization dealing with Child Welfare.

The volunteer service given us by the Girl Scouts through the summer besides being a great assistance to us, has also provided the scouts an opportunity to obtain experience in child care. Members of other organizations and individuals have also assisted in receiving the mothers, weighing, registering and recording weights.

A special effort is being made in two wards of the city to stimulate the women to the necessity of prenatal care. The hospitals in these districts are cooperating in referring all their prenatal clinic patients to us for home visiting. A special nurse has been appointed for this work. It is hoped that through the work in these two wards the interest will extend to other sections of the city.

COUNTY SERVICE

Our county service is a little more than three years old and represents twenty-two districts with sixteen nurses and one supervisor. New districts are added usually at the request of a Woman's Club or a School Board.

The Association conducts its country nursing in cooperation with two committees, the local committee, consisting of a representative from each community group and a county committee composed of the officers from the local committees.

The county clerk relieves the nurses as far as is possible of that bugbear of most public health nurses, record-keeping. Our records, however, have been gradually reduced to bare essentials.

The local services are financed by the community to be served, with the assistance of the Pittsburgh Chapter of the American Red Cross, which will contribute 10 per cent of the budget to the extent of \$200 and the Tuberculosis League of Allegheny County, which permits the community to retain for this purpose 70 per cent of the result of the sale of Christmas Seals.

TUBERCULOSIS LEAGUE OF PITTSBURGH

Organized 1907.

Aim: Cure and prevention of tuberculosis.

Board: The governing board consists of 21 men and 3 women.

Territory: The League covers both urban and rural territory with a combined population of 1,250,000.

Staff consists of a medical director and general superintendent, 4 doctors, 1 supervising nurse, 1 field nurse, 4 dispensary nurses, 1 part-time dentist, 2 social workers, and 4 clerical assistants.

Type of work: Home visiting, clinics, classes and hospital are maintained.

Financial: The League is supported by the sale of Christmas Seals, membership dues, contributions, appropriations, and special funds.

WOODS RUN SETTLEMENT DAY NURSERY

Organized September 25th, 1922.

Aim: The nursery is conducted in connection with the other departments of Woods Run Settlement whose aim is cooperation with neighbors and working out the best possible neighborhood life and spirit.

Board: The governing board consists of 12 men and 8 women.

Territory: The Nursery serves an urban territory with a population of 15,000.

Staff consists of an executive, a medical director, 1 doctor, part-time, 1 nursing director, 1 supervising nurse, 1 general nurse, 1 director of social work, 1 full-time social worker and 2 part-time (volunteers), 1 nutritionist, and 1 clerical assistant.

Type of work: Maintenance of a day nursery. Children are examined every month by a physician and under the daily supervision of a nurse. Special nutrition work is done and the children are taught health habits. Defective children are referred to clinics for treatment and mothers instructed in the proper care of their children. A health center is conducted for mothers, infants, and children.

Financial: The budget for the year amounted to \$5,000, and is supported by membership dues, contributions, and appropriations.

General statement: The cooperating agencies are Associated Charities of Pittsburgh, Catholic Charities, Children's Service Bureau, Lillian Rest, St. John's Hospital, Public Health Nurses, Public Schools, and all departments of Woods Run Settlement.

Scranton

DISTRICT NURSE ASSOCIATION

Aim: Caring for the sick, and teaching people how to keep well.

Board: The governing board consists of 23 women.

Territory: The Association covers an urban territory with a population of 150,000.

Staff: The staff consists of 17 nurses, 13 general duty, 3 baby welfare and 1 supervisor of baby welfare and in charge of prenatal clinics.

Type of work: Instructive visiting nursing, bedside nursing for maternity, chronic, and acute cases, prenatal, baby welfare stations, social service, and corrective work.

Financial: The budget for the year amounted to \$29,889 and is supported by funds from the Community Chest.

General statement: Three baby welfare stations, 5 clinics weekly, nurse, physician, and directors of District Nurse Association in attendance at clinics. Physicians give their services, period of service 4 months. Number of home visits made January 1st to September 1st, 6,728. Number attending clinics from January to September 1st, 1,988. A baby welfare supervisor has been appointed to develop a larger and more intense baby welfare program. The sale of milk at the baby welfare stations has been discontinued, now babies are registered because parents are interested in the health of the child, rather than the buying of milk at two cents cheaper than the regular price, also the nurse is free to do much more than heretofore. A vital part is being played in the campaign for the control of diphtheria, which is being put on by the City Department of Health; toxin-antitoxin is being used at the Baby Welfare Stations. On September 15, 1923, there had been 700 permits turned in by the District Nurses, a total number of permits signed up to date is more than 3,000.

Swarthmore

SWARTHMORE CHAUTAUQUA ASSOCIATION

Organized 1912.

Aim: Chautauqua work.

Board: The governing board consists of 8 men.

Territory: The Association operates in 15 States and three Canadian Provinces, with an urban and rural territory.

Financial: Amount of budget about \$1,000,000, and supported by income from sale of season tickets.

York

VISITING NURSE ASSOCIATION

Organized January, 1909.

Aim: To provide a community public health nursing service.

Board: The Association is governed by an advisory board of 13 men and a board of managers of 32 women.

Territory: The work covers both urban and rural territory with a total population of 55,000.

Staff: The staff consists of a director, assistant director, eight staff nurses, three school nurses, one city nurse and one industrial nurse.

Type of work: Instructive visiting nursing, bedside care for prenatal, maternity, chronic, and acute cases, infant and child welfare clinics, school nursing, follow-up and weighing of children, city public health service, and industrial service.

Financial: Budget for the year amounted to \$32,148.96. The Association is supported by "Red Letter Day" campaign, contributions, fees and appropriations from the city, county, and school board.

General statement: A total of 35,738 visits were made by the nurses. The Department of Maternity service cared for 396 mothers and 393 new-born infants. This Association has been chosen as one of the centers for the study of visiting nurse work, by the N. O. P. H. N.

PHILIPPINE ISLANDS

Manila

PHILIPPINES CHAPTER OF THE AMERICAN RED CROSS

Organized December 5, 1917.

Aim: To alleviate suffering in time of war or disaster and to prevent suffering in time of peace by promoting and engaging in an active public health program. The services in operation are Home Service, which is social service to ex-service men and their families; Junior Red Cross service which is promoting the organization of children for service; Health and Nursing service and Disaster relief. Associated Charities, being an organized charity for the City of Manila, also acting as training center for social workers for the Islands; Production Room, employing poor women needing the occupation and producing garments for use of the Disaster Relief Committee and for the Associated Charities, as well as for returning soldiers and sailors.

Board: The Executive Committee consists of 12 men and 3 women.

Territory: The work of the Chapter covers the entire Islands with a total population of about 11,000,000, divided among 50 branch committees, one in each province. The work in the City of Manila, particularly of the Associated Charities, is for a population of about 285,000.

Staff: The staff includes a general manager, secretary Home Service, Director of Nursing Service, secretary of Junior Red Cross, director of Production Room, secretary of Associated Charities, field director of Military Relief with assistants; Junior Red Cross Dental Service including 2 supervising dentists, 6 dentists in Manila and 53 in the provinces; Nursing Service consisting of 6 supervisors, 17 public health nurses in Manila and 67 in the provinces.

Type of work: Clinics for prenatal, infant and child care; special eye, ear, nose and throat clinics; classes in home hygiene and infant care; home visiting for general nursing care and demonstration on the care and feeding of infants to mothers. Monthly inspection of school children and instruction to mothers on the importance of having defects in their children corrected; health center for mothers and infants; instructor of unlicensed midwives.

Financial: The budget for the current year is:

Senior	350,000.00 pesos
Junior	150,000.00 pesos

The Chapter is supported by annual membership dues and contributions.

General statement: There are four dental clinics in Manila and 46 in the provinces. The school dentists treat more than 25,000 children each month free of charge. 100 undernourished boys and 100 undernourished girls were given a month's vacation in the highlands of Taguna. The Red Cross Nursing staff and the Red Cross physician in Sta. Cruz district, Manila, have reduced the infant mortality rate among the babies under their supervision from 176 to 52 per 1,000 by teaching mothers the proper care of their babies.

PUBLIC WELFARE COMMISSION

Organized May 1, 1921.

Aim: To undertake and promote all work related to maternity and child welfare; to improve the general welfare of the community and to give technical and financial aid to local (town or province) child welfare organizations.

Territory: The Office of the Public Welfare Commissioner serves the entire insular territory with a total population of 10,350,640. (Philippine census, 1918.)

Staff: Commissioner, Chief, Maternity and Child Welfare Division, Chief, Dependent Children Division, Chief, General Welfare Division, Chief Clerk, 16 clerks. Medical Officers: 16 full-time. Nurses: 1 superintendent, 2 assistant superintendents, 6 supervisors, 60 staff, 81 serving puericulture centers. Dentists: 2 part-time. Social Service: 5 full-time. Institutional workers: 2 matrons, 10 teachers, 56 caretakers, helpers, chauffeurs, laborers.

Type of work: The activities are:

1. To investigate, promote, coordinate, inspect, and regulate all work related to maternity, child hygiene and welfare in the Philippine Islands.
2. To study, coordinate, and regulate the efforts of all government agencies and influences in public welfare or social service work and of such private agencies as are receiving government support.
3. To investigate social conditions in the Philippine Islands.
4. To provide orphaned or needy children with means for their care, as well as to provide necessary care to defective and delinquent children.
5. To give technical and financial assistance to public welfare organizations, particularly those whose aims are directed to child welfare work which are known as puericulture center organizations.

Financial: The budget for the year was \$337,812. The Office of the Public Welfare Commissioner is supported by an appropriation from the legislature and by special contributions.

General statement: The Office of the Public Welfare Commissioner has at present two schools of midwives and it is planned to establish more schools of this kind in provincial capitals in order to increase the number of licensed midwives who can substitute ignorant ones. The schools of midwives offer courses of nine months' duration, after the completion of which the graduates are allowed to take the examinations given by the Board of Medical Examiners to qualify as licensed midwives.

RHODE ISLAND

Providence

PROVIDENCE DEPARTMENT OF HEALTH, DIVISION OF CHILD HYGIENE

Reorganized October, 1912.

Aim: Prevention of infant mortality and the protection of child life.

Board: The Division of Child Hygiene is under the charge of the Health Department, which is maintained by the City Council.

Territory: The Division serves an urban territory with a population of 241,000.

Staff: Superintendent. Doctors: 16 part-time. Nurses: 2 special, 15 staff. Dentist: 1 part-time. Clerical assistant: 1.

Type of work: The infant welfare work at present consists of supervision of all infants delivered by midwives in the city, supervision of all infants in the licensed boarding homes of the city, supervision of such infants of unmarried mothers as are not under the supervision of private organizations.

Financial: The budget for the year was \$31,890. The Division is supported by an appropriation from the city.

General statement: The infant supervision is carried on by the infant welfare nurses who visit the homes as frequently as is necessary, and who encourage the mothers to take their infants to the stations periodically when they are well and to call a physician or take the baby to a dispensary or hospital clinic when sick. A minimum of nine visits is made to each baby during its first year. During the year

1,258 infants were delivered by the 53 registered midwives; 36 of these infants died before reaching the age of one month. 14,737 children were seen by the school physicians and 8,663 of these children were found to have some disease or one or more physical defects; 85 per cent of the defects or diseases which the school physician felt should be treated were treated before the beginning of the next school year thus giving 67 per cent of the total defects or diseases noted corrected or cured.

PROVIDENCE DISTRICT NURSING ASSOCIATION

Organized June, 1900.

Aim: To provide trained nurses to care for the sick in their homes and to instruct members of the household in the simple rules of hygiene; to reduce maternal and infant mortality through prenatal and infant welfare work; to give proper supervision to the child of pre-school age through advisory work in the homes and at child health clinics.

Board: The governing board consists of 14 men and 16 women.

Territory: The work of the Association covers an urban territory only.

Type of work: Prenatal and delivery service, hourly nursing, supervision of children of pre-school age, advisory and nursing service in the homes to adults, infants and children, supervision of clinics. (There are special tuberculosis, mental hygiene and venereal disease services.)

Staff: The staff consists of a superintendent, associate superintendent, 2 general supervisors, 2 special supervisors (tuberculosis and child welfare), 6 supervising head nurses. In addition to these there are 38 graduates and 8 pupil nurses apportioned as follows: General service—12 graduates, 8 pupils; tuberculosis service—9 graduates; children's service—14 graduates; venereal disease—1 graduate; mental hygiene—1 graduate; problem—1 graduate.

Financial: The Association is supported by an appropriation from the city, special contributions, annual donations, and Tag Dag Collections. The 1922 budget was \$78,252, and of this \$10,438 was met by fees from patients. The Association has a standardized fee system, but adjustments are made to meet the circumstances of individual families.

General statement: There has been an increase in the volume of the work of the Association during the year and this is especially marked in the prenatal and children's service, 4,489 children were supervised in 1922 as against 4,313 in 1921, an increase of 186. 1,668 prenatal cases were supervised, 323 more than in 1921. The well baby conferences supported by the Rhode Island Congress of Mothers, North End Dispensary, and Branch Avenue Neighborhood Center are supervised by the children's nurses and the number attending these conferences is steadily increasing. Among the pressing needs of our child health work may be noted—more adequate nursing staff; more prenatal clinics; free medical service at time of confinement; better facilities for doing positive health work among children of pre-school age.

RHODE ISLAND BRANCH OF THE NATIONAL CONGRESS OF MOTHERS AND PARENT-TEACHER ASSOCIATION'S CHILD WELFARE DEPARTMENT

Organized 1909.

Aim: To aid all agencies which work in the interest of home and school; to secure the best physical, mental, and moral training for the young.

Board: The advisory council consists of ten men. The executive board consists of 12 women—officers and committee chairmen.

Territory: The work of the department covers the state.

Type of work: The Child Welfare Department includes the codification of children's laws of Rhode Island, establishment of well-baby consultations, and nutrition work in schools.

Financial: The total budget for the year amounted to \$2,350. The Association is supported by per capita fees from member clubs.

SOUTH CAROLINA

Greenville

EMMA MOSS BOOTH MEMORIAL HOSPITAL AND TRAINING SCHOOL FOR NURSES

Organized January 1, 1921.

Aim: Care of normal infants, under two years of age, sick girls of any age, and sick boys under fourteen.

Board: The advisory board consists of 11 men.

Territory: The work of the organization covers North Carolina, South Carolina, Georgia, and Florida.

Staff: The staff consists of a superintendent and 4 supervisors. Medical staff: 6 heads of departments and 15 associated surgeons and doctors. Dentists: 2.

Type of work: In addition to providing medical supervision and care for children, the organization provides clinics and hospital care throughout pregnancy to every expectant mother who can be reached and who is not already receiving medical care.

Financial: The total budget for the year was \$42,680. The organization is supported by the public and by earnings, special contributions and the community chest.

General statement: During the year 3,624 patients visited the clinics; 612 patients were given hospital care.

SOUTH DAKOTA

Aberdeen

PUBLIC HEALTH CENTER OF BROWN COUNTY

Child Welfare Conferences were started March 15, 1921, with the local physicians examining babies. These conferences were held twice a month. The year previous to this the city nurse had held a few conferences without the assistant of a doctor.

In 1922, the pre-school children were included in the conferences.

During 1921, 1922, and 1923 to the present time, the attendance of babies and pre-school children has been 1,702. A great many of these are return cases. Some cases coming regularly from the time of three weeks of age until one year and once or twice a year after one year of age. Reports of births are obtained from the local physicians and calls are made at the home and advice given about breast feeding and care of the baby. The number of calls being made in this connection total 670. Prenatal work was started during the summer of 1922 and up to date 75 calls have been made to the homes.

TEXAS

Austin

BUREAU OF CHILD HYGIENE OF THE STATE BOARD OF HEALTH

Organized September, 1919.

Aim: Infant, maternity, and child hygiene and welfare of Texas.

Board: The Bureau is one of the activities of the State Board of Health.

Territory: The work of the Bureau covers the entire state.

Staff: Director. Nurses: 2 supervisors, 7 staff. Clerical assistants: 4.

Type of work: Health centers are maintained for prenatal patients, infants and pre-school children. Both home visiting and classes for preventive and educational work are conducted. The work deals with both children and adults.

Financial: The Bureau is supported by state and federal appropriations, which amounted to \$77,901.04.

General statement: The pamphlets published by the Bureau are: Care of the Baby (Spanish and English), Prenatal Care, Care of the Teeth, Child Health Centers, Health Hints and Jolly Jingles, What a Child Should Know, Health Rules, Prepare against Disease. Also, we have a series of prenatal letters and have at the present time a file of expectant mothers to whom we are sending monthly prenatal letters. The "Gleaner" is also issued which contains narrative reports of the nurses.

DIVISION OF NUTRITION AND HEALTH EDUCATION, BUREAU OF EXTENSION, UNIVERSITY OF TEXAS

Organized 1914.

Board: The service is through the Bureau of Extension of the University.

Territory: The University Extension Campus is the State of Texas.

Staff: Director; 3 nutrition specialists.

Type of work: Child health and nutrition conferences for the pre-school child; nutrition classes and clinics for the school child; classes for mothers; classes for teachers to train them in health education; Watch-Your-Weight campaigns through fairs and exhibits; Get-Ready-For-School programs; Health Education programs for grade schools in cooperation with Interscholastic League; literature, lectures and exhibit material on health education; club programs on nutrition and health education in cooperation with Package Loan Library; Nutrition and Health Education Institute, held at the University for one week, is planned for workers from the state.

Financial: The Division is supported by an appropriation from the state. No fee is charged for services. The University pays the traveling expenses and salary of the workers, but the community pays the local expenses of the worker while she is in the community.

General statement: "Health and Happiness for Every Texas Child" is the slogan of the Division. The program is formulated as a means of educating the community, the school, the parents and the children themselves as to the causes and dangers of malnutrition, through health education. It is the policy of the Division to serve in an advisory capacity and to assist local communities in the development of permanent health education programs and in the organization of local facilities to make these programs function.

"Child Health is Texas Wealth."

VIRGINIA

Norfolk

THE NORFOLK CITY UNION OF THE KING'S DAUGHTERS, VISITING NURSE SERVICE, CLINIC FOR CHILDREN

Organized 1896.

Aim: To give to the poor and those of moderate means the best home nursing possible under existing circumstances, and to give to the children of the poor, through clinics, the medical attention of specialists.

Board: The governing board consists of 30 women.

Territory: The organization serves an urban territory with a population of approximately 160,000.

Staff: Superintendent who is a nurse; assistant superintendent; infant welfare supervisor; staff nurses: 12 financial secretary, record clerk. Children's clinics, chief of medical staff, 1; medical staff 15 part-time free service. Dentist 1, social worker 1. Volunteer workers 10.

Type of work: Visiting nurse service for acute illness, prenatal, postpartum, newborn and infant welfare.

Financial: The total budget for the year was \$33,135.08. The organization is supported by membership dues, appropriations from city and state, special contributions and fees.

General statement: The different departments of the child welfare clinic are feeding, general eye, ear, nose, and throat, dental, orthopedic, and laboratory. In connection with the clinic is an operating room and children's ward where minor operations, such as tonsils and adenoids, are performed. Follow-up visits in the home is a most important part of the work; these visits are made by all nurses on the staff.

Richmond

RICHMOND SCHOOL OF SOCIAL WORK AND PUBLIC HEALTH

Organized 1917.

Aim: The training of public health nurses, social workers, and recreation and community workers.

Board: The governing board consists of 21 men and 9 women.

Staff consists of a director, supervising nurse, supervising social worker and a clerical assistant.

Financial: The total budget for the year amounted to \$20,000, and is supported by contributions and donations. Tuition fees are charged students. These fees vary according to the course. The usual fee is \$125.00 to \$150.00 a year.

General statement: The school cooperates with the Instructive Visiting Nurse Association, Associated Charities, and State Board of Health, and is affiliated with College of William and Mary and State Board of Health.

VIRGINIA STATE BOARD OF HEALTH, CHILD WELFARE BUREAU

Organized 1918.

Aim: Reduction of sickness and death among children, infants, and mothers, the promotion of health and health education.

Board: The governing board (the State Board of Health) consists of 13 men and 1 woman.

Territory: The Bureau serves an urban and rural territory with a combined population of 2,372,940 as of 1920.

Staff: Director. Doctors: 1 full-time. Nurses: 1 director, 4 supervisors, 40 staff. Dentists: 1 director, 8 full-time. Educational directors, 4. Clerical assistants, 7.

Type of work: Home visiting, clinics and classes. Educational work in public schools and teacher-training institutions. Maternity and infancy welfare.

Financial: The budget for the year was \$63,594. This does not include sums appropriated by counties to match headquarters appropriations. This item more than triples the budget. The Bureau is supported by the state aided by the Federal Government. There are no fees except for the dental clinics.

General statement: The affiliated agencies are the Children's Bureau, U. S. Department of Labor, and the American Red Cross.

WISCONSIN

Milwaukee

DIVISION OF CHILD WELFARE, HEALTH DEPARTMENT

Organized June 17, 1912.

Aim: The child welfare work shall include a study of all conditions which affect infant and child life in Milwaukee both from a sociological and public health

standpoint, and also an investigation of similar work in other cities and countries and by local, municipal, and non-municipal departments and organizations, an effort shall be made by this department to better such conditions in the city of Milwaukee.

Territory: The Division serves the city with a population of 480,000.

Staff: The staff consists of the Commissioner of Health, director of medical service; doctors, 1 full-time, 2 part-time; nurses: 1 director, 3 supervising, 60 staff; dentists: 1 supervisor, 3 full-time, 3 oral hygienists, and 5 clerical assistants.

Type of work: Prenatal, infant welfare, dental, industrial, and tuberculosis clinics are conducted. Home visiting for prenatal, infant, school, dental, cardiac, industrial, tuberculous and venereal diseases, and dependent children.

Financial: The budget for the year amounted to \$119,327.

General statement: While the chief medical director of each division is specialized in his individual line, the nursing service is generalized, one nurse responsible for all activities conducted in a given district. The department operates three sub-stations or health centers where the various clinics are conducted. Aside from these there are 12 child welfare clinics held in public and parochial schools, 1 in a social settlement, and 1 in the public library.

VISITING NURSE ASSOCIATION

Organized 1907.

Aim: To give nursing care and instruction in the home.

Board: Governing board consists of four men and eight women.

Territory: Service given the city of Milwaukee, population 457,147.

Staff: Nurses: 1 superintendent of nurses, 2 supervisors, 7 industrial nurses, 6 special maternity nurses, 17 district nurses. Clerical assistants: 2.

Type of work: Home visiting, prenatal, natal, postnatal, medical, surgical, and industrial nursing.

Financial: The budget for the year October 1, 1922 to October 1, 1923, will be about \$54,000. Is supported by Community Chest, Industries, Metropolitan Life Insurance Company, and fees from patients.

General statement of work from September 1, 1922, to September 1, 1923: Total number of patients attended, 7,980, which includes 1,560 prenatal patients and 816 deliveries. Total number of visits made, 54,540, which includes 1,560 prenatal visits.

MEMBERSHIP

CONTRIBUTORS

1923

District of Columbia

American Red Cross.....Washington, D. C.
Mr. A. C. Moses.....Washington, D. C.

California

Miss Rosalie T. James.....San Francisco

Maryland

Mr. W. F. Cronwell.....Lake Roland

Minnesota

Mrs. C. S. Pillsbury.....Minneapolis

Missouri

Mrs. Wm. F. Randolph, Jr.....Kirkwood

New Jersey

Mrs. George C. Thomas, Jr.....Beverly

New York

Altman Foundation.....New York City
American Relief Administration..New York City
Mrs. Andrew Carnegie.....New York City
Carnegie Corporation.....New York City
Child Welfare League of America
New York City

Commonwealth Fund.....New York City
Mr. Clinton H. Crane.....New York City
Mr. Cleveland Dodge.....New York City
Guggenheim Brothers.....New York City
James McOutcheon & Company..New York City
Mrs. Lewis H. Lapham.....New York City
Laura Spelman Rockefeller Memorial

Mrs. C. H. Martin.....New York City
Milbank Memorial Fund.....New York City
Mrs. James Moses.....New York City
National Child Health Council..New York City
Mrs. Gordon Norrie.....New York City
Mrs. John S. Phipps.....New York City
Mrs. John T. Pratt.....New York City
Mrs. Wm. P. Schell.....New York City
Mr. Mortimer L. Schiff.....New York City
Mrs. Willard Straight.....New York City
Mrs. Henry Osborn Taylor.....New York City
Walker-Gordon Laboratory Co....New York City
Mrs. Wm. S. Walter.....New York City
Mrs. John D. Weeber.....Brooklyn, N. Y.

Ohio

Dr. Wm. M. Champion.....Cleveland
Cleveland Welfare Federation.....Cleveland
Miss Maude A. Morlock.....Cleveland
Dr. Spencer A. Wahl.....Cleveland

Pennsylvania

Mrs. Francis J. Torrance.....Pittsburgh

AMERICAN CHILD HEALTH ASSOCIATION

Membership for Year Ending September 30, 1923

HONORARY

Ballantyne, Dr. J. W.	Edinburgh, Scotland
Bertillon, Dr. Jacques	Paris, France
Broadbent, Hon. Benjamin	Huddersfield, England
Campbell, Dr. Janet	London, England
Guinon, Dr. Louis	Paris, France
Hoover, Mr. Herbert	Washington, D. C.
King, Dr. Truby	Dunedin, New Zealand
Lane-Clayton, Dr. Janet E.	London, England
Lathrop, Miss Julia C.	Rockford, Illinois
Mackenzie, Sir W. Leslie	Edinburgh, Scotland
Newsholme, Sir Arthur	London, England
Pinard, Prof. A.	Paris, France
Sand, Dr. Rene	Paris, France
Weill-Halle, Dr. B.	Paris, France

LIFE MEMBERS

Brown, Mrs. W. Harry, Pittsburgh	Mellon, Mr. A. W., Pittsburgh
Clemson, Mrs. Daniel M., Pittsburgh	Oliver, Mr. W. B., Baltimore
Davidson, Mr. Walter, Milwaukee	Pfister, Mr. Charles F., Milwaukee
Flagler, Mrs. Harry Harkness, New York City	Phipps, Senator Lawrence C., Denver
"Friend", Milwaukee	Putnam, Mrs. William Lowell, Boston
"Friend", Milwaukee	Rockefeller, Mrs. Percy, Greenwich
Gammell, Mr. William, Providence	Russell, Mrs. Marshall, New York City
Gitchell, Miss Katherine, Akron	Schlotman, Mrs. Joseph P., Detroit
*Hanna, Mr. H. M., Cleveland	Stern, Mr. Walter, Milwaukee
Herron, Mr. John W., Pittsburgh	Stotesbury, Mrs. Edward, Philadelphia
Holt, Dr. L. Emmett, New York City	Volker, Mr. William, Kansas City
Horlick, Mr. J. A., Racine	Wade, Mr. J. H., Cleveland
Kieckhofer, Mr. F. A. W., Providence	White, Mr. Richard J., Baltimore
Knox, Mrs. J. H. Mason, Jr., Baltimore	Winton, Mr. and Mrs. C. J., Minneapolis
Knox, J. H. Mason, 3d, Baltimore	I. W.
Knox, Miss Katherine Bowdoin, Baltimore	
Laughlin, Miss A. L., Philadelphia	

*Deceased.

AFFILIATED MEMBERS

UNITED STATES AND INSULAR POSSESSIONS

Alabama

BIRMINGHAM

Social Science Works, Tennessee Coal, Iron
& Railroad Company, 1210 Brown-Marx
Building

California

LONG BEACH

Day Nursery, 805 Alamitos Avenue

OAKLAND

Alameda County Tuberculosis Association,
121 East 11th Street
Baby Hospital Association, 51st and Dover
Streets

Public Health Center of Alameda County, 31st
and Grove Streets

SAN FRANCISCO

Baby Hygiene Committee, American Asso-
ciation of University Women, 323 Haight
Street

Bureau of Child Hygiene, California State
Board of Health, 722 Wells Fargo Build-
ing

California Dairy Council, 216 Pine Street
San Francisco Tuberculosis Association, Room
321 Sharon Building, 55 New Montgom-
ery Street

SANTA BARBARA

Visiting Nurse Association, 133 East Haley
Street

Colorado

COLORADO SPRINGS
Colorado Springs Day Nursery, 822 South
Tejon Street

DENVER
Colorado Child Welfare Bureau, 1061 Clark-
son Street
Denver Tuberculosis Society, 409 Barth
Building
Junior League of Denver, The Junior League
House, 1826 Ogden Street
Visiting Nurse Association, 535-536 Temple
Court

Connecticut

BRIDGEPORT
Department of Health, Corner of Madison and
Washington Streets
Department of Public Charities
Visiting Nurse Association, Professional
Building

EAST HAVEN
Alumnae Association of the Connecticut Train-
ing School for Nurses, New Haven Hos-
pital, 23 Elm Street.

HARTFORD
Connecticut State Department of Health,
Station A, Drawer K, 8 Washington
Street
Union for Home Work, 239 Market Street
Visiting Nurse Association and Babies Hos-
pital, Inc. Health Stations, 34-46 Char-
ter Oak Avenue

MIDDLETOWN
District Nurse Association, 51 Broad Street

NEW HAVEN
Bureau of Nursing, Department of Health
Civic Protective Association, 452 Orange
Street
Connecticut Children's Aid Society, New Ha-
ven Branch, 207 Orange Street
Crippled Children's Aid Society, Inc., 30
Howe Street
Department of Health, 574-78 Grand Avenue
New Haven Orphan Asylum, 610 Elm Street
New Haven Visiting Nurse Association, 35
Elm Street
West End Club, 65 Elmwood Road
Yale University, Department of Education

NORTH HAVEN
New Haven Woman's Club, 430 Fountain
Street

NORWICH
Connecticut Organization for Public Health
Nursing, 500 North Main Street

WATERBURY
St. Mary's Hospital Training School for
Nurses, St. Mary's Hospital
Waterbury Visiting Nurse Association, 35
Field Street

Delaware

WILMINGTON
Child Welfare Commission of Delaware, Ford
Building
Visiting Nurse Association, 213 West Seventh
Street

District of Columbia

WASHINGTON
Child Welfare Society, 2100 G. Street, N. W.
Providence Hospital
Providence Hospital Social Settlement, 408
Third Street, S. E.

Florida

JACKSONVILLE
Bureau of Child Welfare, Florida State Board
of Health

Georgia

ATLANTA
Georgia State Association of Graduate Nurses,
Capitol Avenue and Crumley Street

AUGUSTA
Children's Hospital Association, Harper Street
Sacred Heart Benevolent Association, Corner of
Ellis and 13th Streets.

SAVANNAH
American Red Cross, Home Service Section

Hawaii

HONOLULU
Central Committee on Child Welfare, 2330
Beckwith Street
District Nursing Department, Palama Settle-
ment, King and Liliha Street, P. O. Box
514

WAILUKU, MAUI
Alexander House Settlement

Idaho

BOISE
Dept. of Public Welfare

Illinois

CHICAGO
American Dental Association, 5 North Wabash
Avenue
American Red Cross, Chicago Chapter, 58 East
Washington Street
Chicago Lying-In Hospital and Dispensary, 426
East 51st Street
Chicago Woman's Club, Fine Arts Building,
410 South Michigan Avenue
Elizabeth McCormick Memorial Fund, 848
North Dearborn Street
Infant Welfare Society of Chicago, 308 North
Michigan Avenue
Mothers' Aid of the Chicago Lying-In Hos-
pital and Dispensary
National Dairy Council, 910 South Michigan
Avenue
Providence Day Nursery, 3046 Gratten Ave-
nue
The Scanlon Health Club, 149 West 117th
Street
Stewart Ridge Mothers' Club, 38 West 109
Street

FREEPORT
Child Welfare Station, Amity Society, 2½
East Main Street

GALESBURG
Child Welfare Committee, Knox County Chap-
ter, American Red Cross, The Armory

LA SALLE
La Salle Infant Welfare Station

SPRINGFIELD
Bureau of Child Hygiene, City Health De-
partment

Indiana

ELKHART
Child Welfare Station, League of Women
Voters, 112 Municipal Building
Elkhart Chapter American Red Cross, 109
Municipal Building

EVANSVILLE
Babies Milk Fund Association, 903 First Street

HUNTINGTON
Huntington County Tuberculosis Society

INDIANAPOLIS
Children's Aid Association, 62-63 Baldwin Block
Division of Infant and Child Hygiene, State Board of Health, Room 330, State Capitol
Family Welfare Society of Indianapolis, Fifth Floor, Baldwin Block
Public Health Nursing Association

SOUTH BEND
Children's Dispensary and Hospital Association, 1040 West Division Street

Iowa

DES MOINES
Iowa Tuberculosis Association, 518 Frankel Building

IOWA CITY
Child Welfare Research Station, State University of Iowa

KEOKUK
Visiting Nurse Association

Kansas

CEDAR VALE
American Red Cross, Chautauqua County Chapter

MANHATTAN
Kansas State Agricultural College, Department of Household Economics

WICHITA
Christian Service League of America, 1825 West Maple Street
Public Health Nursing Association, 4th Floor, City Building

Kentucky

LEXINGTON
Fayette County Board of Education

LOUISVILLE
Bureau of Child Hygiene, State Board of Health
Neighborhood House, 428 South First Street
Public Health Nursing Association, 215 East Walnut Street

Louisiana

NEW ORLEANS
Child Welfare Association, 544 Audubon Building
Louisiana State Board of Health

Maine

AUGUSTA
Maine Public Health Association, 318 Water Street

CAPE ELIZABETH
Baby Hygiene and Child Welfare Association, Cragmore

Maryland

BALTIMORE
Babies' Milk Fund Association, Pratt and Calvert Streets
Council Milk and Ice Fund, The Navarre
Florence Crittenton Mission, 837 Hollins Street
Gibbons Guild and Day Nursery, 29th Street and Hampden Avenue

Henry Watson Children's Aid Society, Snow Building, Calvert and Lombard Streets
Health Department
Jewish Children's Bureau, 411 West Fayette Street

Massachusetts

BOSTON
Baby Hygiene Association, 561 Massachusetts Avenue
Boston Floating Hospital, 244 Washington Street
Committee on Prenatal and Obstetrical Care of the Women's Municipal League, 49 Beacon Street
Community Health Association, 561 Massachusetts Avenue
Massachusetts Parent-Teacher Association, 248 Boylston Street
Massachusetts Society for the Prevention of Cruelty to Children, 43 Mt. Vernon Street
N. E. Dairy and Food Council, 51 Cornhill
South End Day Nursery, 25 Dover Street
State Department of Health
Sunnyside Nursery, 16 Hancock Street

BROCKTON
Brockton Visiting Nurse Association, 33 Cottage Street

CAMBRIDGE
Infant Welfare Committee, 51 Brattle Street

EAST BOSTON
Maverick Dispensary, Inc., 18 Chelsea Street
Trinity Neighborhood House, 406 Meriden Street

FALL RIVER
Infant Welfare Commission, 1618 Pleasant Street

FALMOUTH
Falmouth Nursing Association

FITCHBURG
Visiting Nurse Association, 9 Prichard Street

FRAMINGHAM
Community Health Station, Community Health and Tuberculosis Demonstration of the National Tuberculosis Association, Crouch Building.

GREAT BARRINGTON
Visiting Nurse Association, 2 Brainard Avenue

HOLYOKE
Child Welfare Commission of Holyoke, 34 Sargeant Street

HYDE PARK
Hyde Park Branch District Nursing Association

LAWRENCE
Children's Nursery, Everett Mills

LOWELL
Lowell Guild, 17 Dutton Street

NEW BEDFORD
Instructive Nursing Association, 202 Coffin Building
New Bedford Children's Aid Society, 12 South 6th Street
New Bedford Day Nursery

NEWBURYPORT
Newburyport Health Centre

SPRINGFIELD
Springfield Day Nursery Corporation, 103 William Street
Visiting Nurse Association, 3 Market Street

WORCESTER
Worcester Society for District Nursing, 27 Elm Street

Michigan

- BATTLE CREEK**
Alumnae Association, Battle Creek Sanitarium
and Hospital Training School for Nurses
- DETROIT**
Babies' Milk Fund of Detroit, 4708 Brush
Street
Children's Free Hospital Association, An-
toine and Farnsworth Streets
Farrand Training School Alumnae Associa-
tion, Harper Hospital
Merrill-Palmer School, 71 Ferry Avenue, East
- FLINT**
Board of Health
- GRAND RAPIDS**
Clinic for Infant Feeding, Louis Street and
Market Avenue
- GROSSE POINT**
Grosse Point Private School
- LANSING**
Bureau of Education, State Department of
Health

Minnesota

- DULUTH**
Infant Welfare Department, Duluth Consistory
Scottish Rite Masons, Masonic Temple
North Star Lodge of Perfection
- MINNEAPOLIS**
Infant Welfare Society, 414 South 8th Street
Visiting Nurse Association, 414 South 8th
Street
- ROCHESTER**
St. Mary's Training School for Nurses
- ST. PAUL**
State Board of Health, State Capitol
Baby Welfare Association, Wilder Building

Mississippi

- JACKSON**
Bureau of Child Welfare, State Board of
Health

Missouri

- COLUMBIA**
State Nurses' Association, Missouri Univer-
sity
- KANSAS CITY**
Children's Bureau, 408 East 11th Street
Minute Circle Friendly House, 1907 Indiana
Avenue
St. Luke's Child Welfare Club, 1843 West
Pennway
Thomas H. Swope Settlement, 1608 Campbell
Street
Visiting Nurse Association, 658 Gibraltar
Building, 818 Wiandotte Street
- ST. LOUIS**
Board of Religious Organizations, 417 Vic-
toria Building
Missouri School of Social Economy, Univer-
sity of Missouri, 2338 South Broadway
Missouri Tuberculosis Association, 306 Ogden
Building
Municipal Nurses' Board, Department of Pub-
lic Welfare, 209 Municipal Courts Build-
ing
St. Louis Children's Aid Society, Vanol Build-
ing, Vandeventer and Olive Streets
St. Louis Children's Hospital, 500 South
Kingshighway
St. Louis Maternity Hospital, 4518 Washing-
ton Boulevard
St. Louis Pediatric Society, 3525 Pine Street

Montana

- GREAT FALLS**
State Association of Graduate Nurses

Nebraska

- LINCOLN**
Division of Child Hygiene, Department of
Public Welfare, 406 State Capitol
Extension Service, Agricultural College
- OMAHA**
Visiting Nurse Association, 505 City Hall

Nevada

- RENO**
State Board of Health, Child Welfare Di-
vision, City Hall

New Hampshire

- BERLIN**
Berlin Mills Company's District Nurse
- MANCHESTER**
Board of Health

New Jersey

- ATLANTIC CITY**
Atlantic City Day Nursery, 124 North In-
diana Avenue
Child Federation of Atlantic City, Presston
Apartments, Atlantic and Pennsylvania
Streets
- GREYSTONE PARK**
New Jersey State Hospital
- JERSEY CITY**
Division of Child Hygiene, Health Depart-
ment, 268 Montgomery Street
Hudson County Tuberculosis League, 100 Sip
Avenue
- MONTCLAIR**
Board of Health, Municipal Building
- MOORESTOWN**
New Jersey Congress of Mothers
- NEWARK**
Babies' Hospital, 437 High Street
Commission for the Blind, 9-11 Franklin
Street
New Jersey Tuberculosis League, 9 Franklin
Street
- ORANGE**
Diet Kitchen of the Oranges, 17 North Es-
sex Avenue
- PARSIPPANY**
Morris County Children's Home
- PLAINFIELD**
Visiting Nurse Association, Municipal Build-
ing
- TRENTON**
Division of School Medical Inspection and
Welfare Nursing, Room 317, City Hall
Mercer County Health League, Room 310,
City Hall

New York

- ALBANY**
State Board of Charities
State Department of Health
- AMSTERDAM**
Infant and Child's Welfare League, 31 Di-
vision Street
- BATAVIA**
Batavia Infant Welfare Association, 24 West
Main Street

BROOKLYN

American Red Cross, 165 Remsen Street
 Brooklyn Children's Aid Society, 72 Schermerhorn Street
 Brooklyn Pediatric Society, 4402 Twelfth Avenue
 Maternity Center Association, 72 Schermerhorn Street
 Visiting Nurse Association, 80 Schermerhorn Street

BUFFALO

District Nursing Association, 181 Franklin Street

CANAAN

Berkshire Industrial Farm

ITHACA

Department of Hygiene and Preventive Medicine, Cornell University

JAMESTOWN

Visiting Nurse Association

NEWBURGH

Associated Charities, 21 Grand Street

NEW YORK

Alice Chapin Adoption Nursery, 2100 Lexington Avenue
 American Nurses' Association, 370 Seventh Avenue
 Argonne Association of America, 370 Seventh Avenue
 Babies' Hospital, 657-9 Lexington Avenue
 Berwind Free Maternity Clinic, 125 East 108rd Street
 Boys' Work Division, The International Committee of Y. M. C. A.'s, 347 Madison Avenue
 Bryson Day Nursery, 151 Avenue B
 Bureau of Educational Experiments, 144 West 13th Street
 Child Welfare League of America, 130 East 22nd Street
 Children's Welfare Federation of New York City, 505 Pearl Street
 Federation for Child Study, 2 West 64th Street
 Greenwich House Health Center, 27 Barrow Street
 Henry Street Settlement, 265 Henry Street
 Hospital Social Service Association of New York City, 9 East 37th Street
 A. Jacobi Division for Children of the Lenox Hill Hospital, 136 West 87th Street
 Jewish Board of Guardians, 356 Second Avenue
 Judson Health Centre, 243 Thompson Street
 Maternity Center Association, 370 Seventh Avenue
 Mulberry Community House, 256 Mott Street
 National Child Labor Committee, 1230 Fifth Avenue
 National Child Welfare Association, 70 Fifth Avenue
 National Federation of Day Nurseries, 105 East 22nd Street
 National League of Nursing Education, 370 Seventh Avenue
 National Organization for Public Health Nursing, 370 Seventh Avenue
 National Tuberculosis Association, 370 Seventh Avenue
 New York Academy of Medicine, 17 West 43rd Street
 New York Association for Improving Conditions of the Poor, 105 East 22nd Street
 New York County Chapter, American Red Cross, Health Service Department, 598 Madison Avenue
 New York Diet Kitchen Association, 370 Seventh Avenue
 New York Nursery and Child Hospital, Social Service Department, 161 West 61st Street

New York Tuberculosis Association, 10 East 39th Street
 Presbyterian Hospital, Out-Patient Department, Madison Avenue and 70th Street
 Sloane Hospital for Women, 447 West 59th Street
 State Charities Aid Association, 105 East 22nd Street
 Visiting Nurse Service, 99 Park Avenue
 Women's City Club, 22 Park Avenue

PATCHOGUE

Suffolk County Tuberculosis Committee, 2 Masonic Temple

RIVERDALE-ON-HUDSON

Riverdale Health League

ROCHESTER

Bureau of Health
 Public Health Nursing Association, 79 St. Paul Street
 Social Service Department, Rochester General Hospital
 Tuberculosis Association of Rochester and Monroe Counties

SYRACUSE

St. Mary's Maternity Hospital and Infant Asylum, 1601 Court Street
 Visiting Nurse Association, 511 South Warren Street

TROY

Troy Woman's Club, 9 Lake Avenue

UTICA

Baby Welfare Committee of Utica Inc., 318 Genesee Street

North Carolina**KINSTON**

Caswell Training School, Box 191

RALEIGH

Bureau of Maternity and Infant Hygiene, State Asylum, 1601 Court Street
 Board of Health
 State Board of Health

Ohio**CANTON**

Canton Day Nursery Association, Cleveland Avenue, South

CINCINNATI

Babies Milk Fund Association, 600 Livingston Building
 Free Dental Clinic Society, Guilford School, 4th and Ludlow Streets
 Home for the Friendless and Foundlings, 433 North Court Street
 Jewish Community House, 415 Clinton Street
 Ohio State Association of Graduate Nurses, Cincinnati General Hospital
 Public Health Federation, 25 East 9th Street
 Visiting Nurse Association, 220 West Seventh Avenue

CLEVELAND

American Red Cross Teaching Center, 2525 Euclid Avenue
 Associated Charities, 614 Electric Building
 Babies' Dispensary and Hospital, 2500 East 35th Street
 Board of Health
 Catherine Horstmann Home, 4270 Riverside Drive, West Park
 Catholic Charities Office, Standard Theatre Building
 Children's Aid Society, 10427 Detroit Avenue
 Children's Bureau, 512 Electric Building
 Children's Fresh Air Camp, 11007 Buckeye Road
 Cleveland Christian Orphanage, 10907 Lorain Avenue
 Cleveland Congress of Mothers and Parent-Teachers' Association, Y. W. C. A., Prospect and East 18th Streets

Cleveland Day Nursery and Free Kindergarten Association, 2050 East 96th Street
 Cleveland Federation of Women's Clubs, 1792 East 93rd Street
 Cleveland Humane Society, City Hall
 Cleveland Mouth Hygiene Association, 701 Schofield Building
 Cleveland Nutrition Clinics, 817 Williamson Building
 Cleveland Protestant Orphan Asylum, 5000 St. Clair Avenue
 Council Educational Alliance, 3754 Woodland Avenue
 County Board of Health, Old Court House
 Department of Nursing Education, College for Women, Western Reserve University
 East Cleveland Welfare Association, 14149 Euclid Avenue
 Federation of Jewish Charities, 1529 Guardian Building
 Graduate Nurses' Association, 2157 Euclid Avenue, N. E.
 Home of the Holy Family, West Park
 Jones Home, 8518 West 25th Street
 Lakeside Dispensary, Lakeside Avenue at East 12th Street
 Merrick House, 2581 West 11th Street
 St. Ann's Maternity Hospital, 3409 Woodland Avenue
 St. John's Orphanage, 2619 Franklin Avenue
 St. Joseph's Orphan Asylum, 6431 Woodland Avenue
 St. Vincent Charity Hospital, East 22nd and Central Avenue
 St. Vincent's Orphan Asylum, 3315 Monroe Avenue
 Salvation Army Rescue Home, 5905 Kinsman Road
 University Public Health Nursing Station, 2573 East 56th Street
 The Visiting Nurse Association of Cleveland, 2157 Euclid Avenue

COLUMBUS

Instructive District Nursing Association, 276 East State Street

EATON

Preamble County Board of Health

ELYRIA

Ohio Society for Crippled Children, East River and Broad Streets

TOLEDO

Toledo Dental Dispensary Association
 Toledo District Nurse Association, 1517 Monroe Street

YOUNGSTOWN

Visiting Nurse Association, 102 East Front Street

Oklahoma**OKLAHOMA CITY**

Oklahoma City Public Health Nursing Association, 203 City Hall
 Oklahoma Public Health Association, 315 Oklahoman Building
 Tuberculosis Society of Oklahoma City, 410 Empire Building.

TULSA

Tulsa County Public Health Association, 15 West 11th Street

Oregon**PORTLAND**

Bureau of Child Hygiene, 1021 Selling Building
 Oregon Child Health Association, 643 Court House

Visiting Nurse Association, 1004 Spalding Building
 Young Woman's Christian Association, 580 Chapman Street

Pennsylvania**BERWICK**

American Red Cross, Greater Berwick Chapter, City Hall

BETHLEHEM

Baby Health Station, Second and Polk Streets

CHESTER

Child Health Centre

ERIE

Erie County Anti-Tuberculosis Society, 510 State Street

HARRISBURG

Department of Public Instruction

PHILADELPHIA

Babies' Hospital, South 7th and Delancey Streets

Child Federation, 1506 Locust Street
 Child Welfare Magazine, 7700 Lincoln Drive, Chestnut Hill

Children's Bureau, 1432 Pine Street

Children's Hospital, Bainbridge, 18th and Fitzwater Streets

Community Health Center, 428 Bainbridge Street

Philadelphia Association of Day Nurseries, 1523 Spruce Street

Philadelphia Health Council and Tuberculosis Committee, 10 South 18th Street

Philadelphia Pediatric Society, 2069 North 63rd Street

Preston Retreat, 20th and Hamilton Streets

Public Charities Association, 417 South 15th Street

St. Christopler's Hospital, Social Service Department, Lawrence and Huntingdon Streets

Starr Centre Association, 725-727 Lombard Street

Visiting Nurse Society of Philadelphia, 1840 Lombard Street

White Williams Foundation, 1022 Cherry Street

PITTSBURGH

American Red Cross, Pittsburgh Chapter, 7th Avenue and Smithfield Street

Federation of Jewish Philanthropies, 601 Washington Trust Company Building

Pittsburgh Child Health Council, 503 Nixon Building

Public Health Nursing Association, 600 Grant Street, Room 501

Tuberculosis League of Pittsburgh, 2851 Bedford Avenue

Woods Run Settlement, 3033 Petosky Street, North Side

READING

Visiting Nurse Association, 429 Walnut Street

SCRANTON

District Nurse Association, 228 Adams Avenue

SWARTHMORE

Swarthmore Chautauqua Association

WILKES-BARRE

Visiting Nurse Association, Coal Exchange Building

YORK

Visiting Nurse Association, 208 East Market Street

Philippine Islands**MANILA**

College of Medicine and Surgery, University of the Philippines

Liga Nacional Filipina para de la Proteccion
de la Primera Infancia, 851 Lepanto,
Sampaloc
Philippines Chapter, American Red Cross,
Box 1303
Public Welfare Board, Fajardo Building, 640
Rizal Avenue
St. Paul Hospital, Walled City

Rhode Island**PROVIDENCE**

Child Welfare Department, Rhode Island Con-
gress of Mothers and Parent-Teachers
Association, 96 Alumni Avenue
Division of Child Hygiene, Health Depart-
ment
Providence Child Welfare Committee, 141
Cypress Street
Providence District Nursing Association, 118
North Main Street
State Board of Health, Division of Child
Welfare

South Carolina**GREENVILLE**

Emma Moss Booth Memorial Hospital

South Dakota**ABERDEEN**

Brown County Red Cross Health Unit

WAUBAY

State Board of Health

Tennessee**NASHVILLE**

Division of Child Welfare and Maternal Hy-
giene of Tennessee, State Board of Health,
405 Seventh Avenue, North

Texas**AUSTIN**

Bureau of Child Hygiene and Public Health
Nursing, State Board of Health
Bureau of Extension, University of Texas
Home Economics Extension, University of
Texas

DALLAS

Civic Federation of Dallas, 415-17 Mercan-
tile Bank Building

WACO

American Red Cross, Waco McLennan County
Chapter, Bankers Trust Building

Utah**LOGAN**

Utah Agricultural College, Extension Service

Vermont**PROCTOR**

Cavendish House Inc.

Virginia**NORFOLK**

King's Daughters Visiting Nurse Association,
800 West York Street

RICHMOND

Bureau of Child Welfare and School Hygiene,
State Board of Health

Washington**SEATTLE**

Health Department, Public Safety Building

Wisconsin**BELOIT**

Beloit Visiting Nurse Association, 422 Public
Avenue

MILWAUKEE

Bureau of Child Hygiene, Department of
Health, City Hall
Children's Free Hospital, 219 Tenth Street
Department of Health
Milwaukee Infants' Hospital, 477 Bradford
Avenue
Milwaukee Visiting Nurse Association, Pereles
Building

CANADA**Alberta****EDMONTON**

Department of Public Health, Province of
Alberta

British Columbia**VANCOUVER**

Fraser Valley Dairies, Ltd., 405 Eighth Ave-
nue, West

VICTORIA

Provincial Board of Health

New Brunswick**FREDERICTON**

New Brunswick Department of Health

Nova Scotia**HALIFAX**

Massachusetts Halifax Health Commission,
Health Centre Number One, Admiralty
House

Ontario**HAMILTON**

Babies' Dispensary Guild, General Hospital

OTTAWA

Department of Health, Elgin Building

TORONTO

Bureau of Child Welfare, Ontario Provincial
Board of Health, Spadina House, Spadina
Crescent
Department of Public Health, City Hall

Quebec**MONTREAL**

Child Welfare Association, Room 702 Blumen-
thal Building, 207 St. Catherine Street,
West

FOREIGN**Brazil****RIO DE JANEIRO**

Comissao Rockefeller, Caixa Postal 49
Escola de Enfermeiras, Rua Visconde de
Itauna 899

China**SHANGHAI**

Council on Health Education, 4 Quinsan Gar-
dens

Czecho-Slovakia**PRAGUE**

Czechoslovak Red Cross, Neklanova 147

MEMBERSHIP LIST

Japan

TOKIO
Bureau for Social Work, Home Department

Mexico

MEXICO CITY
Department of Public Health, Administrative
Section

Poland

WARSAW
Warsaw School of Nursing, U1 Smolna 6

Siam

BANGKOK
Siamese Red Cross Society, Health Section

LIBRARY MEMBERS

UNITED STATES

Alabama

MONTGOMERY
Alabama State Department of Archives and
History

Arizona

BISBEE
Bisbee School Library

Arkansas

LITTLE ROCK
Public Library

California

BAKERSFIELD
Kern County Free Library
LOS ANGELES
Public Library
LOS GATOS
Public Library
SAN FRANCISCO
Lane Medical Library, Sacramento and Web-
ster Streets
University of California Medical School Li-
brary, Second and Parnassus Avenues

Connecticut

GREENWICH
Greenwich Library
HARTFORD
Connecticut State Library
NEW HAVEN
Religious Education Library

District of Columbia

WASHINGTON
Walter Reed U. S. General Hospital Library

Florida

GAINESVILLE
University of Florida Library

Illinois

CHICAGO
Public Library
John Crerar Library, Exchange Box 9
EVANSTON
Free Library
SPRINGFIELD
Public State Library

Indiana

LAFAYETTE
Purdue University Library

Iowa

AMES
Iowa State College Library
IOWA CITY
State University of Iowa Library

Kansas

LAWRENCE
University of Kansas Library

Kentucky

LOUISVILLE
Free Public Library

Maryland

BALTIMORE
Johns Hopkins University Library

Massachusetts

BOSTON
Public Library, Copley Square
Social Service Library, Simmons College, 18
Somerset Street
CAMBRIDGE
Massachusetts Institute of Technology Li-
brary
WOBURN
Public Library

Michigan

ADRIAN
Public Library
ANN ARBOR
General Library, University of Michigan
DETROIT
Public Library
FLINT
Public Library, East Kearsley Street

GRAND RAPIDS
Public Library, Ryerson Public Library Build-
ing

Minnesota

MINNEAPOLIS
Public Library
University of Minnesota Library

Missouri

JEFFERSON CITY
Missouri Library Commission, The Capitol
JOPLIN
Free Public Library, 9th and Wall Streets
KANSAS CITY
Jackson County Medical Society Library
Public Library, 9th and Locust Streets
ST. LOUIS
Public Library, Olive, 13th and 14th Streets
SEDALIA
Public Library

New Jersey

EAST ORANGE
Free Public Library

NEWARK
Free Public Library

New York

NEW YORK
American Institute of Medicine Library, 13
East 47th Street
Metropolitan Life Insurance Company Li-
brary

NIAGARA FALLS
Public Library

OLEAN
Cattaraugus County Board of Health Library,
Exchange National Bank Building

SYRACUSE
College of Medicine Library, Syracuse Univer-
sity

WATERTOWN
Flower Memorial Library, Washington Street

North Carolina

CHAPEL HILL
University of North Carolina Library

Ohio

CINCINNATI
Public Library

CLEVELAND
Medical Library Association

COLUMBUS
Ohio State University Library

Oregon

CORVALLIS
Oregon Agricultural College Library

EUGENE
University of Oregon Library

PORTLAND
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ROSEBURG
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Oregon State Library

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Library Department, Division of Public
Health Education

KITTANNING
Free Library

PHILADELPHIA
Bureau of Municipal Research Library, 805
Franklin Bank Building
College of Physicians Library, 22nd Street
above Chestnut Street
Free Library, 13th and Locust Streets

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Academy of Medicine Library, 322 North
Craig Street

Rhode Island

PROVIDENCE
Public Library, 229 Washington Street

South Dakota

DELL RAPIDS
Carnegie Library

SIOUX FALLS
Carnegie Library

Texas

AUSTIN
State Library

Vermont

BRATTLEBORO
Free Library

Washington

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ton Street

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Hilo

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(Affil.)
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Frear, Mrs. Walter

Wailuku

Alexander House Settlement (Affil.)
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Grant, Mrs. Maud F.
- East Lynn**
Campbell, Mr. N. Merle
- Everett**
Powers, Miss Josephine
- Fairhaven**
Perry, Miss Harriet E.
- Fall River**
Bliss, Miss Genevieve H.
Borden, Mr. Richard P.
Carpenter, Miss Mary L.
Curry, Dr. Edmund F.
Infant Welfare Commission (Affil.)
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King, Dr. George C.
McQuade, Miss Nora, R. N.
Mulligan, Miss Sarah O.
Walker, Miss Ruth A.
- Falmouth**
Falmouth Nursing Assn. (Affil.)
Holden, Mr. C.
Newcomb, Miss Ruth B.
- Fitchburg**
Sears, Miss W. C.
Sheehan, Miss Josephine
Visiting Nurse Assn. of Fitchburg (Affil.)
- Frammingham**
Community Health Station, Community
Health & Tuberculosis Demonstration, Na-
tional Tuberculosis Assn. (Affil.)
Derby, Dr. W. P.
- Gloucester**
Gainley, Miss Margaret E.
- Great Barrington**
Church, Mrs. George
Durant, Mrs. Clark T.
Visiting Nurse Assn. (Affil.)
- Groton**
Cullen, Miss Annie L., P. H. N.
- Harvard**
Frost, Miss Lillian E., R. N.
Warren, Mr. Fiske
- Haverhill**
Clark, Dr. L. J.
- Haydenville**
Lenihan, Miss Mary, R. N.
Pomeroy, Mrs. Elizabeth W.
- Hingham**
Pope, Miss Mildred E.
Poulin, Miss Emily, R. N.
Talbot, Mrs. George Stanley
- Holyoke**
Allen, Dr. Fred H.
Bagg, Dr. Edward P., Jr.
Child Welfare Commission of Holyoke (Affil.)
Perkins, Miss Ella A.
Pratt, Miss Laura S.
Whitten, Mrs. S. H.
- Housatonic**
Ramsdell, Mrs. Thomas S.
- Hyannis**
Beall, Miss Thelma
Williams, Miss Mary
- Hyde Park**
Hyde Park Branch District Nursing Assn.
(Affil.)

Lawrence

Children's Nursery, Everett Mills (Affil.)
 Fuller, Miss Kate T.
 Kennedy, Miss Agnes T.
 McNulty, Miss Marion

Instructive Nursing Assn. (Affil.)
 New Bedford Children's Aid Society (Affil.)
 New Bedford Day Nursery (Affil.)
 Prescott, Mrs. Helen B.
 Terry, Miss Edith Mortimer

Leominster

Buck, Miss Mattie F.

Newburyport

Newburyport Health Centre (Affil.)

Lexington

Ryder, Mr. Robert L.
 Wayne, Miss Madeleine

Newton

Dority, Miss Myra P.
 Flanagan, Mrs. Jos. F.

Littleton

Lawson, Miss Elizabeth, P. H. N.

Newton Centre

Macdonald, Mrs. Elizabeth
 Remon, Miss Marion E.

Lowell

Harriman, Miss Blanche C.
 Lowell Guild (Affil.)
 McNevin, Miss May C., R. N.

Newton Highlands

Seaver, Mrs. M. Estelle

Lynn

Barney, Mrs. E. M.
 Briggs, Dr. Maurice

Newtonville

Bragg, Miss Mabel C.
 Higgins, Miss Effie G.
 Roy, Miss Calista

Malden

Collins, Miss Georgie B.
 Downing, Miss Miriam B.

North Adams

Feeley, Miss Marion E.
 Lyman, Miss Ruth

Medford

Baker, Miss Katherine L.

Northampton

Ayer, Miss Mary E., R. N.
 Reed, Miss Helen R.

Melrose

Moreton, Miss Edith E.
 Searles, Mrs. A. E.

North Andover

Robinson, Miss Grace N., R. N.
 Stevens, Miss Caroline

Melton

Collins, Miss Arabelle, R. N.

Norwood

Downs, Miss Sadie E., R. N.
 Lane, Mrs. J. C.

Merrimac

Managur, Miss Marion P., P. H. N.

Pittsfield

Sprague, Miss Miriam

Middleboro

McGuire, Miss Loretta E.

Plymouth

Shaw, Dr. J. Holbrook

Milton

Brooks, Mrs. Henry G.
 Churchill, Mr. Frank S.
 Tennant, Miss Lucy

Randolph

Molloy, Miss Kittie R.

Nantucket

Coffin, Miss Elizabeth R.

Readville

Amory, Mrs. Robert
 Eustis, Mrs. F. A.
 Hunt, Mrs. John O.
 Saltonstall, Mrs. Robert

Natick

Wright, Miss Geneva A., R. N.

Richmond

Usher, Miss Margaret Woods

New Bedford

Cushman, Miss Ruth
 French, Mrs. Mary Howard
 Geoghegan, Rev. Wm. B.

Roslindale

Ford, Miss Helen

Salem

Walker, Miss Eleanor E.

Sandwich

Westover, Miss Eva

Saxonville

Eaton, Mrs. C. F.

Sharon

Aylsworth, Miss Marion, R. N.

South BostonFay, Miss Lucy A.
Whitaker, Miss C. A.**South Orleans**

Hammatt, Mrs. E. A. W.

SpringfieldClark, Miss Eunice Shedd
Gray, Mr. Franklin J.
Helmrich, Miss Elsie
Howell, Miss Margaret B.
McFarland, Mr. Wm. R.
Ogilvie, Miss Alice D., R. N.
Pottenger, Miss Mary O.
Putnam, Mrs. Roger L.
Springfield Day Nursery Corp. (Affil.)
Stuart, Miss Lillian M.
Visiting Nurse Assn. (Affil.)**Stockbridge**Blanchard, Dr. Elsie
Riggs, Dr. Austen Fox**Taunton**Bassett, Miss Inez E.
MacIntosh, Miss Alice B., R. N.**Uxbridge**

Reese, Mrs. D. H.

Wakefield

Knight, Miss Elizabeth

Watertown

Hollingsworth, Miss Minnie

WaylandAllison, Miss J. Olive
Ames, Mrs. Richard**Wellesley**Cummings, Miss Mabel L.
Sherwood, Miss Margaret P.
Wheeler, Miss H. S.**Westfield**Bonus, Mrs. Eleanor S., R. N.
Sauers, Miss Edith M.**West Medford**

Child, Mrs. L. M.

West Medway

Wilson, Miss Mary L.

Weston

Fisher, Mrs. R. T.

Williamstown

MacCormack, Miss Mary C. V.

Winchester

Emerson, Miss Ella M.

WinthropBesom, Miss Pansy V.
Simon, Mr. Isaac B.**Woburn**

Woburn Public Library (Library)

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Callahan, Miss Mary M.
Chamberlain, Miss Helen
Clarke, Miss Harriet E.
Elias, Mrs. Saul
Emerson, Miss Charlotte
Fuller, Miss Margaret
Gage, Mrs. Mabel Knowles
Higgins, Mrs. Milton P.
Inman, Mrs. Chester M.
Jaquith, Miss Lucia L., R. N.
Knight, Miss Mary A.
Paige, Miss Minnie R., R. N.
Regan, Miss Jennie M.
Rice, Mrs. William E.
Robertson, Miss Marion E.
Sullivan, Miss Hannah M.
Thayer, Mrs. Edward D.
Thomas, Miss Mildred C.
Tilton, Mrs. Henry O.
Vance, Miss Pauline H.
Woodward, Mrs. S. B.
Worcester Society for District Nursing (Affil.)**MICHIGAN****Adrian**Neagle, Mr. Harry B.
Public Library (Library)
Robb, Miss Genevieve I., R. N.**Albion**

Foote, Miss Roberta E., R. N.

Allegan

Lande, Miss Lena M., R. N.

Alpena

Gamble, Miss Lucile

Ann ArborBartlett, Mrs. Barbara H.
Cowie, Dr. D. Murray

General Library (Library)
 Keletram, Miss Dorothy
 MacDonald, Miss Pearl
 Perkins, Mrs. F. B.
 Sundwall, Mr. John

Battle Creek

Alumnæ Assn. of the Battle Creek Sanitarium
 & Hospital Training School for Nurses
 (Affil.)
 Barber, Miss Lorna.
 Cooper, Miss Lenna F.
 Dudley, Mrs. D. R.
 Hoffman, Miss Charlotte
 Kellogg, Dr. J. H.
 Mitchell, Miss Helen S.
 Roth, Miss Linda M.

Benton Harbor

Spanenberg, Miss Louise

Berrien Springs

White, Miss Dorothy E.

Centerville

Van Dyke, Miss

Charlotte

Snow, Mrs. John Ralph, R. N.

Coldwater

Safford, Miss Ada M.

Covert

Leusenkamp, Miss Eleanor

Detroit

Babies' Milk Fund of Detroit (Affil.)
 Backus, Mrs. Standish
 Berman, Dr. Harry S.
 Blodgett, Dr. W. E.
 Book, Mrs. Frank P.
 Burdon, Mrs. H. W.
 Butzel, Mr. Fred
 Children's Free Hospital Assn. (Affil.)
 Cooley, Dr. Thomas B.
 Davies, Dr. Thomas Stephen
 - Detroit Public Library (Library)
 Dye, Miss Eleanor M.
 Farrand Training School Alumnæ Assn. (Affil.)
 Green, Mrs. Heatley
 Heaton, Mrs. James S.
 Heenan, Mrs. J. R.
 Hoobler, Dr. B. Raymond
 Kamperman, Dr. George
 Krolik, Mr. Julian H.
 Laning, Dr. George M.
 Ledyard, Mrs. Henry
 Lee, Mr. Frank H.
 McGregor, Mrs. Tracy
 McMahon, Miss Mary
 May, Dr. Earl W.
 Meader, Dr. F. M.
 Merrill-Palmer School (Affil.)
 Montgomery, Dr. J. C.
 Pearl, Mr. N. H.
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 Pope, Mrs. Willard
 Reid, Miss Eva Belle
 Ross, Miss Grace

Ross, Dr. Worth
 Rowland, Dr. R. S.
 Schlotman, Mrs. Joseph B.
 Simonson, Mr. M.
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 Streeter, Mrs. Bertha
 Walker, Miss Alice
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 White, Miss Edna N.
 White, Dr. Thomas W.
 Wilson, Miss Louise
 Wooley, Mrs. Helen T.
 Yerkes, Miss Lola G.

East Lansing

Dye, Miss Marie

Escanaba

Bowman, Miss Flora, R. N.

Essexville

Rae, Mrs. Edna A.

Flint

Burghdorf, Miss Flora M., R. N.
 Davis, Dr. Wm. R.
 Fletcher, Miss Mary L.
 Flint Board of Health (Affil.)
 Public Library (Library)
 Sayles, Miss Marie
 Stephenson, Dr. Robert

Grand Blanc

Chapel, Miss Rosa B.

Grand Rapids

Abbott, Mr. L. R.
 Clinic for Infant Feeding (Affil.)
 Grand Rapids Public Library (Library)
 Hull, Miss Alice E.
 Johnston, Dr. Collins H.
 Smith, Dr. Richard R.

Graying

Judy, Miss Maude Lee, P. H. N.

Grosse Pointe

Grosse Pointe Private School (Affil.)
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 Meddaugh, Miss Clara S.
 Parker, Mrs. Walter R.

Hancock

Fischer, Dr. A. F.

Highland Park

Braley, Dr. Wm. N.
 Greene, Mrs. F. M.

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Appelgren, Miss Emma L.

Jackson

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Jonesville

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KalamazooConley, Miss Charlotte
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Menominee

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Moon, Dr. A. Raymond
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Sabin, Miss Clover M.

Blue Earth

Hedemark, Miss M. S.

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Paschke, Miss Clara L., R. N.

ChisholmLipovetz, Mr. F. J.
Bayliss, Mrs. Willard**Crosby**

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DuluthBrubaker, Miss Bertha, R. N.
Infant Welfare Dept., Duluth Consistory
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Kellogg, Miss Minerva
McDonald, Dr. A. L.
North Star Lodge of Perfection (Affil.)
Rowe, Dr. Olin Wallace**Eveleth**Fletcher, Miss Esther
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MankatoNichols, Mr. M. A.
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 Carpenter, Mrs. Lawrence W.
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 Crosby, Miss Caroline M.
 Crosby, Mr. F. M.
 Farnsworth, Mrs. E. C.
 Gallaher, Mrs. H. P.
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 Houlton, Miss Ruth
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 Infant Welfare Society of Minneapolis (Affil.)
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 Jones, Dr. G. M.
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 Marfield, Mrs. John Russell
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 Myers, Mr. J. A.
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 Peck, Miss Helen Chesley
 Pillsbury, Mrs. Charles
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 Rudebough, Miss Kathryn
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 Seham, Dr. M.
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 Stebbins, Miss Abigail E.
 Stephens, Miss Stella M.
 Strate, Miss Nettie M.
 Ulrich, Dr. Mabel S.
 University of Minnesota Library (Library)
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 Winton, Mr. C. J.
 Winton, Mrs. C. J.
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Nopeming

Laird, Dr. Arthur T.

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Onoka

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Owatonna

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Robbinsdale

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St. Cloud

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St. Paul

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Wheaton

Erlandson, Miss Helena G.

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Artz, Miss Adalyne
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Lambert, Miss Eva

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Yazoo City

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Wrething, Miss Alma

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Free Public Library (Library)
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Beattie, Miss Mabel
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Burger, Dr. F.
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Cowherd, Dr. J. B.
Friendly House (Affil.)
Hill, Mr. A. Ross
Hoering, Miss Lena
Hussey, Miss Anne E.
Jackson County Medical Society Library (Library)
Kansas City Public Library (Library)
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Lunbeck, Mrs. Zola S., R. N.

McCrum, Dr. Thos. B.
Marty, Mr. J. G.
Minute Circle Clinic (Affil.)
Neff, Dr. Frank C.
Pasley, Miss Mildred A. B.
Patrick, Dr. Grace E.
Rock, Miss Mildred
St. Luke's Child Welfare Club (Affil.)
Satterwhite, Miss Jael H.
Schorer, Dr. Edwin H.
Thomas H. Swope Settlement (Affil.)
Tremble, Mrs. George T.
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Walthall, Dr. Damon
Wilhelm, Dr. F. E.
Zimmerschied, Miss Ada

Kirksville

Crow, Miss Jane
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Scully, Miss Margaret, R. N.

Leadwood

Reeves, Mr. J. W.

Maplewood

Jennings, Miss Anna W.

Marshall

Fulkerson, Mrs. Mildred P.

Moberly

Jones, Miss Olive R.

Mound City

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Neosho

Biggs, Miss Mabel P.

Robla

Wilburn, Mrs. L. A., P. H. N.

St. Charles

Steele, Dr. A. D.

St. Joseph

Kapprel, Miss Mary O., R. N.
Rudloff, Miss Mary O.

St. Louis

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Abern, Mr. Albert M.
Barroll, Mr. Joseph R.
Bedal, Dr. Adelheid C.
Blair, Dr. V. P.
Bleyer, Dr. A. S.
Bliss, Dr. M. A.
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Bray, Mrs. J. W.
Brookings, Mr. Robert S.
Carpenter, Mrs. Geo. O.
Carpenter, Mrs. Geo. O., Jr.
Catlin, Mrs. Theron
Chamberlain, Miss Alice Adams

Coffin, Dr. Ernest L.
Cooper, Mrs. Katherine G. Fenimore
Crawford, Mr. Hanford
Curry, Miss Ophelia

Dommersberg, Miss A. Marie

Ehrenfest, Dr. Hugo

Engelbach, Dr. William

Eoff, Miss Maude

Fischel, Dr. Walter

Goldman, Mrs. Stanley

Goldsmith, Miss Josephine F.

Graves, Dr. Wm. Washington

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Hall, Mr. Frederick H.

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Harris, Mrs. Benjamin

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Hunkins-Willis Co.

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Jacks, Mrs. F. R.

Jeans, Dr. Philip C.

Jones, Mrs. James C.

Jones, Mrs. Robert McKittrick

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Knight, Mr. Harry

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Langsdorf, Mr. Julius

Lewis, Mrs. Robert D.

Lippmann, Dr. Gustave

Loeb, Mrs. Leo

McCulloch, Dr. Hugh

McLaughlin, Miss Margaret M.

McPheeters, Mrs. S. B.

Mallinckrodt, Mrs. Edward, Jr.

Mallinckrodt, Mr. Edward, Sr.

Marriott, Dr. W. McKim

Martin, Dr. Charles P.

Mesker, Mrs. Frank

Miller, Dr. W. McN.

Missouri School of Social Economy (Affil.)

Missouri Tuberculosis Assn. (Affil.)

Moore, Mrs. George T.

Mudd, Dr. Harvey G.

Municipal Nurses' Board (Affil.)

Nagel, Mrs. Charles

Philbrook, Miss Eta F.

Raglund, Miss Glory H.

Renard, Mrs. W.

Rothschild, Mr. Sidney

St. Louis Children's Aid Society (Affil.)

St. Louis Children's Hospital (Affil.)

St. Louis Maternity Hospital (Affil.)

St. Louis Pediatric Society (Affil.)

St. Louis Public Library (Library)

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Shapleigh, Mr. A. L.

Shepley, Mr. John F.

Simmons, Mrs. Wallace D.

Skelton, Miss Neva

Smith, Mrs. Eunice

Snell, Miss Florence

Steedman, Mrs. E. H.

Steedman, Mrs. Geo. F.

Stephenson, Miss Mary E.

Stinde, Mr. E. B.

Stix, Mrs. Charles

Stone, Mr. C. R.

Stoner, Mrs. Stanley

Swift, Mr. Fred H.

Tower, Mrs. Sarah L.

Veeder, Dr. Borden S.

Wall, Miss Anna

Watkins, Mrs. Horton

White, Dr. T. Wistar

Wislezemus, Mr. Fred W.

Wretling, Miss Alma

Zahorsky, Dr. John

Zelnicker, Mr. W. A.

Savannah

Baird, Miss Selah K., P. H. N.

Sedalia

Sedalia Public Library (Library)

Springfield

Latimer, Miss Lois

Saxman, Miss Ethel Julia

Ullman, Mr. Wm.

Warrensburg

Walters, Mr. F. W.

MONTANA

Billings

Oliver, Mrs. J. C.

Bozeman

Branegan, Miss Gladys

Dillon

MacGregor, Miss Katherine Jean

Eskalaka

Shaw, Mr. A. L.

Great Falls

Montana State Assn. of Graduate Nurses (Affil.)

Helena

Bonness, Dr. Hazel Dell

Dunning, Miss Fannie

Muckley, Miss Mary M.

Thomas, Miss Margaret

Missoula

Buckhous, Miss Gertrude

Norbert

Murphy, Mrs. E. L.

Roundup

Pigot, Dr. C. T.

Scobey

Shoop, Miss Ruth

Sidney

Marion, Miss Jessie

Whitehall

Cutland, Miss Marguerite I.

White Sulphur Springs

Bruner, Mr. T. A.

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Chadron

Delzell, Miss Ethel
Remillard, Mrs. Louis

Columbus

Pope, Miss Pearl

Fairbury

Bengston, Miss Nellie

Geneva

MacOwan, Miss Amy, R. N.

Jamison

Blake, Mrs. Dwight

Kearney

Stuff, Miss Lillian B., R. N.

Lincoln

Dillon, Dr. I. H.
Division of Child Hygiene (Affil.)
Extension Service, Agricultural College (Affil.)
Fedde, Miss Margaret
Loomis, Miss Alice M.
Murphy, Miss Louise M., R. N.
Noble, Miss Margaret
Peters, Miss Matilda
Shonka, Miss Rose
Vorhis, Miss Birdie
Wolfe, Dr. Katherine H. K.

Omaha

Davis, Mrs. Thomas L.
Hamilton, Dr. H. B.
Henske, Mrs. J. A.
Jones, Dr. Newell
Joos, Miss Gertrude, R. N.
McCabe, Miss Florence
McClanahan, Dr. H. M.
Moore, Dr. Clyde
Murphy, Dr. J. Harry
Reimers, Miss Rosabelle
Sage, Dr. E. C.
Visiting Nurse Assn. (Affil.)

Papillion

Patterson, Miss Harriet

Pern

Crago, Mr. A.

York

Wegner, Dr. E. S.

NEVADA**Ely**

Johnston, Miss Nettie E.

Overton

Kelly, Mr. A. L.
Perkins, Miss Ella Hafen

Reno

Hall, Mr. John
Russell, Dr. Viola
Somers, Miss Catharine F.
State Board of Health (Affil.)
Stilwell, Miss Mary E.

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Amherst

Pettengill, Miss B. Hazel

Berlin

Berlin Mills Company's District Nurse (Affil.)

Claremont

Connor, Miss Daisy M.

Concord

Crough, Miss Elena M., R. N.
Mitchell, Miss Clara A., R. N.
Murphy, Miss Elizabeth M.

Dover

Hyde, Miss Frances
Wignot, Mr. J. E.

Durham

Williamson, Miss Daisy Dean

Hancock

Perry, Miss Margaret

Hanover

Husband, Mrs. R. W.
Lord, Mr. Frederic P.
Woods, Prof. Erville

Keene

Croteau, Miss Julia L.

Manchester

Doherty, Miss Juliet M., R. N.
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Peterboro

Lindsley, Mrs. John

Portsmouth

Prescott, Miss Josie F.

Sunapee

Marion, Mrs. J. W. J.

Walpole

Hathaway, Miss Minnie L.

Winchester

Wetmore, Miss Alice W.

Wolfboro

Stiles, Miss Ruth, R. N.

NEW JERSEY**Allendale**

Phair, Mrs. R. A.

Atlantic City

Atlantic City Day Nursery (Affil.)
 Child Federation of Atlantic City (Affil.)
 Lamkin, Miss Elenora B.
 Marvel, Dr. Philip

Avon

Nolan, Mr. Harry E.

Bayonne

Alden, Miss Caroline E.
 Wall, Miss Louise H.

Belleville

Mumford, Miss Eleanor W.

Bernardsville

Johnson, Miss Florence
 Ogilvie, Miss Nellie

Bordentown

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Bound Brook

Wood, Miss Elizabeth T.

Burlington

Hanna, Miss Margaret S.

Camden

Desborough, Miss Josephine W.
 Lyell, Miss Helen F.
 Taylor, Miss Hennie M.
 Weir, Miss Mary A.

Chatham

McIntire, Miss H. Ruth

Clifton

Thomas, Miss Emma F.

Clinton

Haver, Miss Jennie M.

Collingswood

Davis, Miss Bella C., R. N.
 Warren, Miss Marion E., R. N.

Convent

Moore, Mrs. Paul

East Orange

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Southworth, Dr. Thomas S.
State Charities Aid Assn. (Affil.)
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Stevens, Dr. Albert M.
Stevens, Miss Anne A., R. N.
Stillman, Mrs. Ernest G.
Stockman, Miss Dorothy
Storey, Dr. Thomas A.
Strasser, Miss Edna W.
Taylor, Mr. Graham Romeyn
Taylor, Mr. Harris
Taylor, Mrs. Henry Osborn
Taylor, Miss M. E.
Tebbutt, Miss Clara M.
Tempest, Miss Mary, R. N.
Thurston, Mr. Henry W.
Tierney, Miss Mary C.
Tipping, Miss Sara, R. N.
Titworth, Mr. Frederick S.
Van Blarcom, Miss Carolyn C.
Van Ingen, Miss Anne H.
Van Ingen, Mrs. McLane
Van Ingen, Dr. Phillip
Van Nest, Miss Elizabeth R.
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Wallace, Dr. Charlton
Wallace, Miss Lucie M.
Wardwell, Mr. Allen
Wardwell, Miss Florence
Webster, Miss E.
Webster, Mrs. Jennie E. B.
Weigel, Miss Selina A., R. N.
Weill, Miss Blanche A.
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Wertheim, Mrs. Jacob
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Wheeler, Miss Marianna
Whitcomb, Mrs. E. N.
Whitney, Miss Anne L.
Widdemer, Mr. Kenneth D.
Widger, Miss Barbara
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Wile, Dr. Ira S.
Williams, Mr. & Mrs. Blair S.
Williams, Dr. J. F.
Williams, Dr. Linsly R.
Williams, Mr. Stephen G.
Williamson, Dr. Carolyn G.
Wilson, Mrs. Cora E. McDewitt
Wilson, Miss Eva
Wilson, Miss May G.
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Woodward, Miss Elizabeth A.

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Bishop, Dr. John L.
Leo-Wolf, Dr. Carl G.
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Northport

Babbott, Mrs. F. L., Jr.

Norwich

Clarke, Mrs. Margaret S.

NyackArildson, Miss Louise E.
Peters, Miss Elsie D.**Ogdenburg**

Potter, Miss G. Marion

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Straight, Mrs. Willard

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Wells, Miss Charlotte**Oyster Bay**

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PatchogueDoyle, Mrs. Geo. H.
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Penn Yan

Kipp, Miss Louise

Perry

Alden, Miss M. Adelaide

Peru

Martin, Miss Alberta M.

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Faulkner, Miss Mary C.

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Gilbert, Miss Elsie E.

Potsdam

Gould, Miss Beulah L.

PoughkeepsieAllen, Miss Jane C., R. N.
Johnson, Mr. & Mrs. Burges
Lewis, Miss Mary E., R. N.
Thelberg, Dr. Elizabeth B.**Red Hook**

Brennan, Miss Helen C.

Rhinebeck

Miller, Dr. George N.

Richmond Hill

Robb, Mrs. W. O.

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Comstock, Miss Laura
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Eastman, Mr. George
Fanning, Miss Vera V.
French, Miss Charlotte
Hardy, Miss Edith O.
Huey, Miss Katherine
Irwin, Miss Clyde
Kaiser, Dr. Albert D.
Kennedy, Mr. D. M.
Laird, Miss Mary
Lyon, Mrs. Edmund
Norton, Mr. Herman J.
Price, Mrs. O. J.
Public Health Nursing Assn. (Affil.)
Rambo, Dr. Wm. S.
Seward, Mr. W. R.
Social Service Dept., Rochester General Hos-
pital (Affil.)
Still, Miss Virginia M.
Tracy, Miss Margaret P.
Tuberculosis Assn. of Rochester & Monroe
Co. (Affil.)
Walker, Miss Edith M.
Witherspoon, Dr. Charles R.**Rockville Center**

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Roslyn

Jessup, Mr. Everett C.

EyePalmer, Miss Edna, R. N.
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McGee, Miss Anna M., R. N.
Vander Bogart, Dr. Frank

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Van Ulach, Miss Belle

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Spillo, Mrs. R.**Suffern**

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Aldrich, Mrs. Winthrop W.

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Barber, Miss Edith M.
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Hazard, Mrs. Frederick Rowland
Johnson, Miss Cora E. Kingsley
Mercer, Mr. A. Clifford
O'Meara, Miss Sara
Pass, Mrs. James
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Silverman, Dr. A. Clement
Smith, Dr. Cornell N.
Solway Circle (Affil.)
Visiting Nurse Assn. of Syracuse (Affil.)
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Witherby, Mrs. E. C.
Wynkoop, Dr. E. J.**Tarrytown**

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Tompkinsville, S. I.Parkhurst, Miss Anita
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Clark, Miss Catherine, R. N.
Cluett, Mrs. E. H.
Porter, Mrs. Arthur Tappan
Slattery, Rev. John T.
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Tuckahoe

Joaquim, Miss Lucy L.

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Mortimer, Miss Katherine R.

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Clarke, Dr. T. Wood
Crouse, Mrs. D. N.
Hale, Dr. William, Jr.
Putnam, Mrs. C. F.
Sherman, Mr. Richard U.**Verbank**

Stillman, Miss Dorothea

WatertownBaker, Miss Gertrude F.
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Yost, Mrs. Nicholas D.**Watervliet**

Freeman, Miss Florence R.

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Bliss, Mrs. C. N., Jr.

Westfield

Piehl, Miss Emma W.

West Haverstraw

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West Hebron

Williams, Miss Carrie L.

West New Brighton

Willcox, Mrs. Wm. G.

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Allen, Miss Harriet S.

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Senn, Miss H. E.**Woodmere**

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Hanna, Mrs. I. C., R. N.
Morris, Mrs. Elizabeth C.**Bakersville**

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Tuttle, Mrs. H. W.
Weil, Mrs. Minas

Greensboro

Gove, Dr. Anna M.
Noyes, Dr. Bessie

Greenville

Wilson, Miss Alice V.

High Point

Cox, Miss Clara I.

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Caswell Training School (Afl.)

Marshall

Morris, Miss Mary T., R. N.

Raleigh

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Hobbs, Miss Cleone E.
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Myers, Miss Katherine
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Salisbury

Cain, Miss Effie E., R. N.

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Weldon

Knight, Mrs. Wm. L.

Wilmington

Cutchin, Miss M. L.
Peschau, Mrs. Henry B.
Sidbury, Dr. J. Buren
Stanley, Dr. J. W.

Wilson

Newman, Miss Martha C.
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Winston-Salem

Carlton, Dr. R. L.
Davis, Mr. Clarence W.

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Eyloftson, Miss Cecelia

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Hebron

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Nelisse, Miss Leona

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Jewish Community House (Afl.)
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Kock, Dr. Henry E.
Lamb, Dr. Frank H.

Lincoln, Miss Faith
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 Odums, Miss Martha
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 Pierce, Miss Elizabeth
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 Pogue, Mrs. Samuel F.
 Pollak, Mrs. J. A.
 Pollak, Mrs. Maurice E.
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 Public Library (Library)
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 Rosenthal, Mrs. Wm.
 Rothenberg, Dr. Samuel
 Schaengold, Mr. Ben
 Schlau, Miss Lena L.
 Smith, Mrs. Rufus B.
 Stickney, Miss Helen B.
 Stokes, Mrs. Ada S.
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 Webb, Mrs. F. L., R. N.

Cleveland

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 American Red Cross Teaching Center (Affil.)
 Associated Charities (Affil.)
 Babies' Dispensary & Hospital of Cleveland (Affil.)
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 Baldwin, Mrs. Arthur D.
 Baldwin, Mr. S. Prentiss
 Bill, Dr. Arthur
 Bishop, Dr. R. H., Jr.
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 Case, Mrs. George S.
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 Catholic Charities Office (Affil.)
 Champion, Dr. Wm. M.
 Chandler, Miss Dorothea
 Children's Aid Society (Affil.)
 Children's Bureau (Affil.)
 Children's Fresh Air Camp (Affil.)
 Cleveland Christian Orphanage (Affil.)
 Cleveland Congress of Mothers & Parent-Teachers' Assn. (Affil.)
 Cleveland Day Nursery & Free Kindergarten Assn. (Affil.)
 Cleveland Federation of Woman's Clubs (Affil.)
 Cleveland Humane Society (Affil.)
 Cleveland Medical Library Assn. (Library)
 Cleveland Mouth Hygiene Assn. (Affil.)
 Cleveland Nutrition Clinics (Affil.)
 Cleveland Protestant Orphan Asylum (Affil.)
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 Council Educational Alliance (Affil.)
 County Board of Health (Affil.)
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 Du Pleasis, Miss Ethel M., R. N.
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 Epstein, Dr. J. W.
 Everett, Mrs. L. H.
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 Francina, Sister M., R. N.
 Froggett, Miss Laura Bell
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 Garfield, Mr. Abram
 Garfield, Mrs. Abram
 Garfield, Mrs. James R.
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 Gerstenberger, Dr. H. J.
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 Hanna, Mrs. Howard M., Jr.
 Harvey, Mr. M. O.
 Harvey, Mrs. P. L.
 Harvey, Mrs. Perry Williams
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 Henick, Mrs. Frank
 Herrick, Mrs. F. C.
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 Hord, Mrs. John
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 Jones, Home (Affil.)
 Judson, Mrs. Arthur D.
 King, Mrs. Harry
 King, Miss Janette L.
 La Ganke, Miss Florence M.
 Lakeside Dispensary (Affil.)
 Leager, Mrs. Ellen R.
 Livingston, Miss Lena
 Ludlow, Miss Susan B.
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 McBride, Mrs. Malcolm L.
 McKean, Miss Ida P.
 McLoud, Mrs. Norman
 Marcelline, Sister M.
 Mather, Mrs. A. S.
 Mather, Mrs. Philip
 Mather, Mr. Samuel
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 Morlock, Miss Maude
 Oliver, Mrs. John G.
 Peskind, Dr. A.
 Peters, Miss Martha, R. N.
 Pettit, Mr. J. E.
 Phillips, Dr. John
 Pottinger, Miss Margaret C.
 Powell, Miss Florence A.
 Prescott, Mrs. O. W.
 Prescott, Mrs. W. H.
 Protzman, Miss Belle
 Raymond, Mrs. S. A.
 Rees, Mrs. William
 Rueteink, Miss Irene
 Ruh, Dr. H. O.
 St. Ann's Maternity Hospital (Affil.)
 St. John's Orphanage (Affil.)
 St. Joseph's Orphan Asylum (Affil.)
 St. Vincent's Charity Hospital (Affil.)
 St. Vincent's Orphan Asylum (Affil.)
 Salvation Army Rescue Home (Affil.)
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 Schroeder, Miss Agnes H.
 Seckel, Miss Emma
 Shaw, Miss Cora Grace, R. N.
 Sherwin, Miss Belle Winden
 Silver, Mrs. M. T.
 Sincere, Mr. Victor W.
 Taylor, Mrs. Kenneth
 Thomas, Dr. J. J.
 Thompson, Dr. Joseph Raymond

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(Affil.)

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Wason, Mrs. Charles W.
White, Mrs. W. T.
Wolfenstein, Dr. S.
Wyckoff, Dr. C. W.

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Holloway, Mrs. Leo E.

Columbus

Bell, Mr. J. O.
Carlton, Miss Anna M.
Garvin, Miss Alma L.
Gromme, Miss Henrietta
Hopkins, Dr. Blanche
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Lanman, Miss Faith R.
Leland, Dr. R. G.
Lewis, Miss Virginia
Meyer, Miss Minna T.
Ogle, Miss Lelia C.
Ohio State University Library (Library)
Ortelle, Miss Joanne, R. N.
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Tuttle, Miss Jane L.
Wing, Miss Clara B.
Wingert, Dr. H. Shindle

Coshocton

Carr, Dr. Edmund O.

Dayton

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Ewalt, Miss Mary A., R. N.
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Abbe, Miss Norah D.
Ohio Society for Crippled Children (Affil.)

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Stull, Mrs. Clara Ross

Greenfield

Gaut, Miss Dorothea E.

Hilliards

Early, Miss Wenzela

Kent

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Logan

Green, Miss Sadie H.

Lorain

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Mansfield

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Cleave, Miss K. Frances, R. N.
Duke, Miss Emma
Ford, Mrs. Eleanor Jones

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Jones, Miss Evelyn, R. N.
Wagner, Miss Esther

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Virtue, Miss Anna L.

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Oberlin

Paddock, Miss Ruth F., R. N.
Savage, Mr. C. W.

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Loomis, Miss Eleanor M.

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Pemberville

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Rio Grande

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St. Clairsville

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Salem

Lewis, Mr. N.

Sandusky

McClure, Miss Charline
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Scott

Shafer, Miss Adecima

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Leslie, Dr. Hugh J.

Steubenville

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Hardgrove, Miss Bessie H., R. N.
Kirk, Miss Bella M.
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Jost, Miss Elizabeth L.
Latham, Dr. Edgar M.
Newell, Miss Rebecca A.
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Toledo District Nurse Assn. (Affil.)
Wither, Mrs. E. K.

Troy

Pauly, Miss Susan P.

Utica

Bricker, Mrs. J. F.

Van Wert

Dippery, Mrs. F. L.
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Warren

Moon, Miss Anna E.

Wellington

Maramore, Miss Martha J.

Willoughby

Seelye, Mrs. Mary W.

Youngstown

Bentley, Mrs. Robert
Campbell, Miss Winnifred
Cooper, Miss Elizabeth H.
Kiddle, Mrs. Lucille
Modeland, Miss Emma S.
Palmer, Miss Mary C.
Robinson, Miss Elizabeth
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Womer, Miss M. Edna

Wooster

Barrett, Dr. C. D.

Xenia

Evers, Miss Helen A.

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Chickasha

Quillan, Miss Harriet

Enid

Shirley, Mr. J. C.

Gage

Connard, Miss May

Muskegee

Jackson, Mrs. W. C.

Newkirk

Di Donato, Miss Caroline

Norman

Smith, Miss Mabel E.

Oklahoma City

Baird, Miss Vera
Benson, Mrs. Walter
Dilworth, Miss Lula P.
Hoaglund, Miss Leila
Norris, Miss Kathryn L.
Noton, Miss Ethel, R. N.
Oklahoma City Public Health Nursing Assn.
(Affil.)
Oklahoma Public Health Assn. (Affil.)
Ralston, Miss Lucile
Taylor, Dr. W. M.
Tuberculosis Society of Oklahoma City (Affil.)

Okmulgee

Bishop, Miss Josephine, R. N.

Stillwater

Frazier, Mrs. Daisy M.

Tonkawa

Schwarz, Mr. Maury

Tulsa

Odukirk, Mrs. Charlotte
Rice, Mrs. John A.
Tulsa County Public Health Assn. (Affil.)

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Walker, Miss Ertien T., R. N.

Baker

Knight, Mr. F. S.

Coquille

Irwin, Mrs. C. C.

Corvallis

Johnston, Miss A. Grace
McComb, Mrs. Jessie D.
Oregon Agricultural College Library (Library)
Prentiss, Mrs. Sara W.
Smith, Miss Margery M.
Wait, Miss Bernice

Eugene

Beardsley, Dr. G. S.
DeBusk, Mr. Buchard W.
Stewart, Dr. Bertha S.
University of Oregon Library (Library)

Forest Grove

Ledford, Mrs. D. H.

Harrisburg

Clark, Dr. D. G.

Hood River

Kimball, Mrs. F. B.

Klamath Falls

Fricke, Miss Lydia L., P. H. N.

Medford

Devereaux, Miss Margaret

Monmouth

Taylor, Miss Laura J.

Oswego

Rockey, Mrs. Eugene

Portland

Bilderback, Dr. J. B.
Billmeyer, Miss Mary P., R. N.
Bureau of Child Hygiene (Affil.)
Eames, Dr. Edna D.
Fitzgibbon, Mrs. John H.
Hartley, Miss Helen S.
Hopper, Miss Elizabeth M.
Library Assn. (Library)
Moore, Dr. C. Ulysses
Oregon Child Health Assn. (Affil.)
Oregon State Library (Library)
Rockey, Mrs. Paul
Schreyer, Miss Cecil L.
Thomson, Miss Elnora E.
Visiting Nurse Assn. (Affil.)
Warner, Dr. Estella Ford
Willard, Mrs. Ernest
Wilson, Miss Bertha G.
Young Woman's Christian Assn. (Affil.)

Roseburg

Roseburg Public Library (Library)

PENNSYLVANIA**Alden**

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Allentown

Hersh, Miss Isabel
McNees, Miss Hazel
Tritschler, Miss Louise

Altoona

Kech, Dr. Aug. S.
Miller, Dr. Fred D.

Ardmore

Carter, Miss Helen Cole

Athens

Coon, Mr. C. Melvin

Avondale

Palmer, Miss Mary

Berwick

American Red Cross, Greater Berwick Chapter (Affil.)

Bethlehem

Baby Health Station (Affil.)
Dustin, Miss Gertrude O. L.

Bloomsburg

Rogers, Miss Mabel Claire

Bradford

Martin, Miss Margaret W., R. N.

Bristol

Baggs, Miss Louise

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Bryn Mawr College Library (Library)
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Colton, Mrs. Sabin W., Jr.
Cooper, Mrs. Walter I.
Woolman, Mr. Edward

Butler

Miller, Miss Zella C.

California

Smith, Miss Anna E.

Canton

Frey, Miss Anna, R. N.
Marble, Miss Flora Louis

Carrolton

Murphy, Miss Nell, R. N.

Chambersburg

Gable, Miss Nettie, R. N.

Chester

Child Health Centre (Affil.)
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Chestnut Hill

Bain, Mrs. Henry, Jr.
Ford, Mrs. Bruce

Clarion

Keatley, Miss Jean, R. N.

Clarks Summit

Gaskill, Mrs. W. H.

Clymer

McDevitt, Mrs. Maude, R. N.

Cokeburg

Johnson, Miss Hilda

Coraopolis

Curry, Mrs. Grant
Smith, Miss Mary S.

Dalton

Gamewell, Miss Emily K., R. N.

Danville

Gerhardt, Miss M. M.

Darby

Dick, Dr. H. L. H.

Devon

Jeanes, Mrs. Henry S.
Kercher, Mrs. Merrill A.

Dixmont

Hutchinson, Mrs. Henry A.

Donora

Vernon, Mrs. R. J.

Duncannon

Snyder, Miss Louvilla

Dunmore

Dooley, Miss Mary M., R. N.

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Easton

Burns, Mr. John F.
McDowell, Mrs. Evelyn
Miller, Miss Elizabeth R.
Mintz, Miss Florence
Poore, Miss Mary
Scott, Miss Rachel M.
Sheaffer, Miss Susan V., R. N.

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La Rue, Mr. D. W.

Eдинboro

Jones, Miss Ada E.

Elkins Park

Lichtenthaler, Miss Louise
Loeb, Mrs. Howard A.
Sloss, Mrs. Milton J.

Erie

Erie County Anti-Tuberculosis Society (Affil.)
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Ross, Dr. Fred. E.

Flourtown

Neland, Miss Elsa

Franklin

Beach, Miss Clara G.
Brown, Mrs. Eleanor

Freeland

Everett, Dr. S. A.

George School

Brown, Mrs. Grace W.

Germantown

Harrington, Mrs. Arthur M.
Neff, Miss Emma
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